

## CHAPTER III: FAIR-TRADE BANANAS

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## 1. INTRODUCTION

As explained in Chapter 1, there are several fair-trade standards owned by different NGOs. However, over 95 percent of fair-trade bananas were traded under the system of the Fairtrade Labelling Organizations International (FLO) in 2007. This report uses the term “Fairtrade” created by FLO to designate fair-trade bananas certified under the FLO system (where FLO-Cert is the exclusive certification body). Alternatively, the term ‘fair-trade’ is used to designate more generally all bananas sold to consumers as fair-trade, including those certified by FLO-Cert.

## 2. PRODUCTION AND SUPPLIERS OF FAIR-TRADE BANANAS

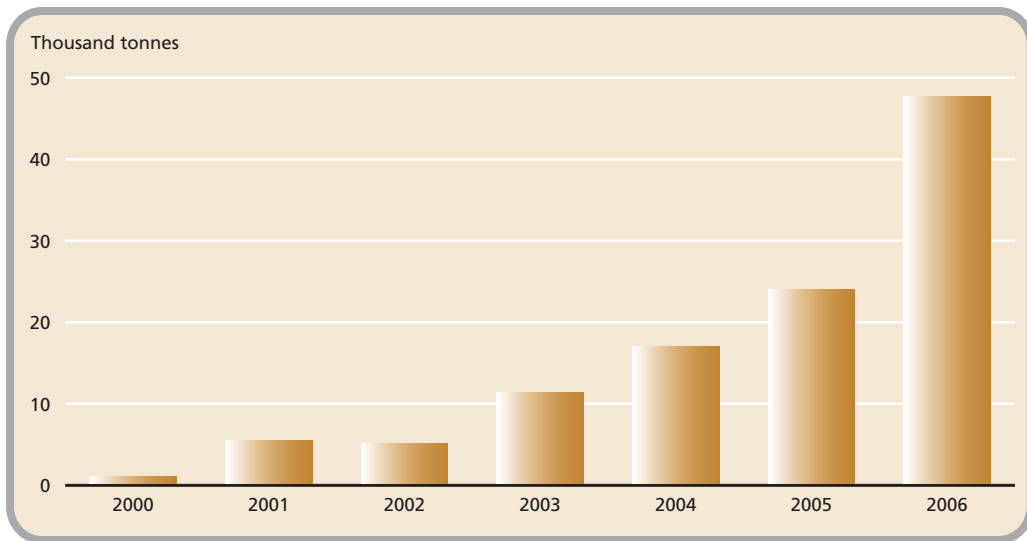
It is estimated that over 250 000 metric tonnes of fair-trade bananas were exported in 2007, accounting for 1.7 percent of global banana exports. Of these, some 70 000 metric tonnes were certified organic. Exports rose by 50 percent from 165 000 metric tonnes in 2006 following a rise of 46 percent the previous year. Although there had been initiatives by alternative trade organizations (ATOs) to import fair-trade bananas since the mid-1980s<sup>13</sup>, imports of fair-trade bananas under an independent certification system only started in 1996, when Max Havelaar Netherlands launched the first Fairtrade labelled bananas in Rotterdam. In 2007 there were 49 banana grower organizations certified by FLO-Cert in 10 countries (Colombia, Costa Rica, the Dominican Republic, Ecuador, Ghana, Peru, Jamaica and three countries of the Windward Islands). The largest suppliers are the Windward Islands, Ecuador and the Dominican Republic. Together they accounted for some 80 percent of Fairtrade banana exports in 2006.

The **Windward Islands Farmers’ Association** (WINFA) initiated an industry-wide conversion to fair-trade in the late 1990s. This move was made to a large extent as a response to the loss of competitiveness and market share in its sole market, the United Kingdom, in the wake of the successive reforms of the EU import system. The Windward Islands shipped their first certified Fairtrade bananas in 2000. By 2002 Windward bananas were sold by most major UK supermarket chains. The transition to fair-trade accelerated in 2005 as the European Union was preparing to liberalize further its banana import system and eliminate the tariff quotas. Exports rose more than fourfold from 2003 to 2006 (Figure 27). Presently some 3 500 farmers in the islands of Saint Lucia, Saint Vincent and the Grenadines and Dominica are Fairtrade certified accounting for approximately 90 percent of active banana farmers. In 2007 between 80 and 90 percent of banana exported from the Windward Islands were Fairtrade certified. The total Fairtrade premium earned by Windward farmers between 2000 and 2007 was estimated at close to USD 10 million (Smith, 2008). While conventional banana prices (FOB) have been declining, Fairtrade prices have remained stable. Fairtrade bananas are exported to the United Kingdom by the Windward Islands Banana Development and Exporting Company, WIBDECO, a subsidiary of the Ireland-based multinational banana company Fyffes. In 2008 WIBDECO decided to export only Fairtrade bananas (Notifax, 2008).

**Jamaica** exports Fairtrade certified bananas. Two producer groups are certified (Eastern Banana Estates Ltd. and St. Mary Banana Estates Ltd.). There is one Fairtrade certified

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<sup>13</sup> In particular the Swiss NGO GEBANA started importing fair-trade bananas from Nicaragua in 1985.

**Figure 27 - Exports of Fairtrade bananas from the Windward Islands, 2000-2006**

Source: WINFA Fair Trade Unit (2007).

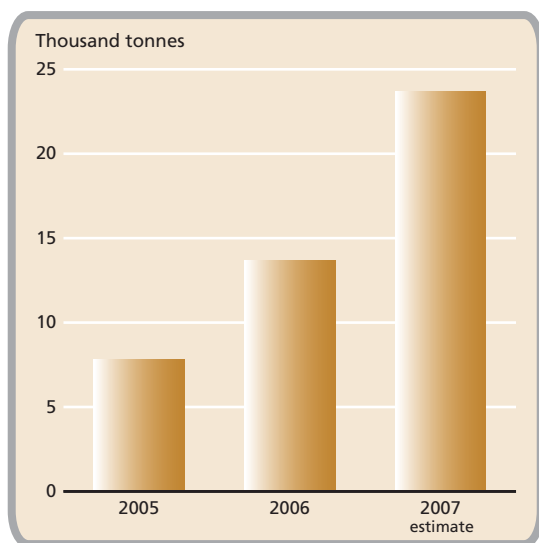
exporter (Banana Export Company Ltd.). Jamaica's banana plantations have been repeatedly devastated by hurricanes in recent years and local commentators have questioned the future of its export banana industry.

The **Dominican Republic** was one of the first countries to export certified fair-trade bananas in the late 1990s and presently it is a leading supplier. FLO (2007) reports exports of nearly 40 000 metric tonnes in 2006, up from some 32 000 metric tonnes in 2005. The main market is Western Europe, in particular the United Kingdom. According to Fruitrop (2007), 800 small growers and a large plantation have been certified by FLO, representing 70 percent of all banana producers. There were 23 producer organizations and five exporters certified by FLO-Cert in 2007. Certified Fairtrade farmer organizations include Asociación de Bananeros Unidos (ASOBANU) which was founded in 1998 and has nearly 200 members. All of them have small-scale farms and are located in the North West. More than half of the members are also certified organic while the others are in transition to organic farming. Another Fairtrade group, the BANELINO association (Bananos Ecológicos de la Línea Noroeste) is also located in the North West. It groups six cooperatives and has a total of some 340 members. All are small-scale farmers and over half of them are also certified organic. There are other fair-trade groups such as Finca 6 in the Azua province (South West).

In **Ecuador** Fairtrade bananas are exported by the El Guabo banana farmer association. The association was founded by 14 farmers in 1997. Its membership has expanded steadily since then and there were over 400 farmers by 2007. The volume of bananas exported as Fairtrade grew from 4 600 metric tonnes in 2000 to over 40 000 metric tonnes in 2006. In recent years, the association has encouraged farmers to convert to organic cultivation with the aim that eventually all members should be certified organic. According to data supplied by AEBE (2008), El Guabo exported some 31 000 metric tonnes of organic bananas in 2007, making it the leading organic banana exporter in Ecuador.

In **Costa Rica** there is only one certified supplier of Fairtrade bananas, Coopetrabatur, a banana grower cooperative. It was established by the workers of a banana plantation formerly owned by Chiquita Brands on the southern Pacific coast of Costa Rica. The cooperative has 69 members and employs an additional 109 workers. Its main markets

**Figure 28 - Peruvian exports of fair-trade bananas, 2005-2007**



Source: FLO (2007)

are Switzerland and Benelux countries. In 2006 it bought a smaller plantation in the Guapiles region of the Atlantic coast. Costa Rica is a relatively small supplier of Fairtrade bananas with less than 10 000 metric tonnes exported annually in the 2005-2007 period.

**Colombia** also exports Fairtrade bananas. Its main markets are Europe and the United States. Its export volumes are relatively small compared to other suppliers and to its overall banana shipments.

**Peru** started exporting Fairtrade bananas only recently. The volume of shipments has risen rapidly in the past three years (Figure 28). Fairtrade bananas are mainly produced by small-scale farmers usually organized in associations or cooperatives located in the region of Piura. These groups include Asociación de Pequeños Productores de Banano Orgánico de Samán y Anexo (APPBOSA) in the Sullana province, Piura region. All the members are also certified organic and the totality of Peru's Fairtrade banana exports is organic.

Outside the Latin American and Caribbean region, **Ghana** is the only country that exports FLO-certified bananas. Ghana was the first country to export Fairtrade certified bananas in 1996. There is only one certified producer-exporter, the Volta River Estates Limited company (VREL), a large plantation located south of Lake Volta. Until 2006 VREL was also the only Ghanaian exporter of bananas<sup>14</sup>. It cultivates bananas on five production sites covering 500 hectares in total. In 2005 VREL obtained organic certification for three of its sites and now also exports bananas that bear the double certification organic and fair-trade. Approximately 85 percent of its shipments are directed to the United Kingdom and France. According to FLO (2007), VREL exported some 4 000 tonnes of Fairtrade bananas in 2005 and approximately 3 500 tonnes in 2006, over half of which were also organic.

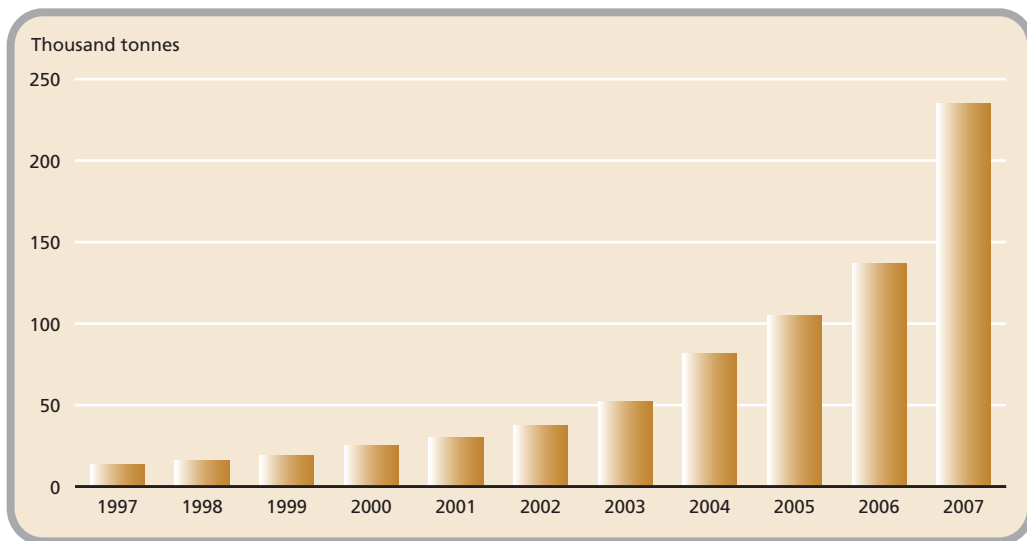
## 3. MARKETS FOR FAIR-TRADE BANANAS

### 3.1 Overview

Global sales of Fairtrade certified foods reached nearly €2.4 billion (USD 3.5 billion) in 2007 according to the Fairtrade Labelling Organizations International (FLO, 2008)<sup>15</sup>. Sales increased by 47 percent (in euro terms) over their level of 2006 and further growth is forecast for 2008. Tropical products such as tea, cocoa, coffee and bananas enjoyed the fastest growth rates. On average, sales expanded by 40 percent annually over the period 1997-2007. By the end of 2007, 632 producer organizations in 58 developing countries in Africa, Asia, the Caribbean and Latin America were certified by FLO. FLO estimates that

<sup>14</sup> Since then, Dole has established a local subsidiary, Golden Exotics that produces and exports fresh bananas.

<sup>15</sup> Since this figure only reflects sales of FLO certified foods and does not include sales by ATOs, the total market value of fair-trade food is slightly higher.

**Figure 29 - Word sales of Fairtrade bananas, 1997-2007**

Note: Source: FLO; non-FLO fair-trade bananas are not included

these organizations represent 1.5 million farmers and farm workers, and when counting their families and dependents, overall 7.5 million people benefit directly from fair-trade. Since FLO was created in 1997, the number of certified producer organizations has trebled. FLO certified products are available in more than 60 countries. The main markets for fair-trade products are the United States, the United Kingdom, France, Switzerland and Germany, accounting for nearly USD 2 billion in 2007 (82 percent of global sales of FLO-labelled foods). Some NGOs that do not belong to the FLO system also sell fair-trade labelled foods, but the quantities are very small compared to those of FLO-labelled foods.

In 2007 there were 52 FLO licensed Fairtrade fruit traders in 22 countries. Banana is by far the leading fair-trade fruit in both volume and value terms. The world trend is positive. Overall, it is estimated that total sales of fair-trade bananas (i.e. those certified by FLO and those imported by ATOs outside the FLO system) worldwide approached one-quarter of a million tonnes in 2007. Fairtrade bananas accounted for the bulk of this number; according to FLO, they reached 234 000 metric tonnes in 2007 (Japan excluded), up 72 percent from 136 000 metric tonnes in 2006 (Figure 29). This accounted for slightly over one percent of global net banana imports. Although the absence of data on retail prices makes it difficult to calculate the value of fair-trade banana sales, it was estimated to be in the order of USD 450 million in 2007 (including double certified fair-trade and organic bananas).

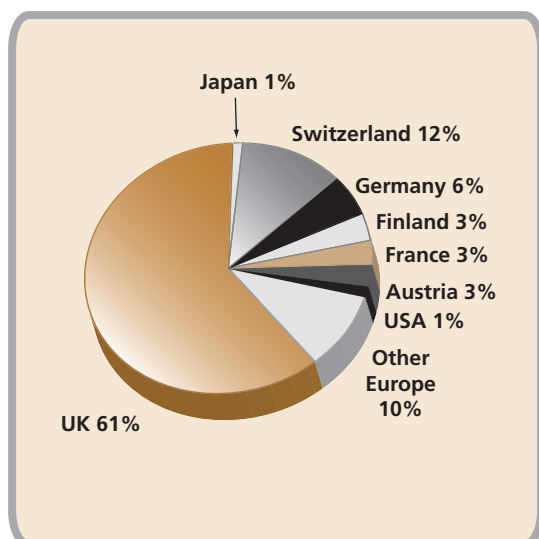
The share of FLO bananas that are also certified organic rose steadily until 2006, reflecting consumers' demand for both social and environmental sustainability. It stood at 33 percent in 2006, up from 30 percent in 2005. However, it dropped to 28 percent in 2007, as organic supply could not keep up with the surge in demand for fair-trade bananas. Unlike fair-trade, organic certification usually requires a transition time of two to three years (unless the land was not cultivated with agrochemicals). Sales of fair-trade bananas show a strong geographical concentration, with Europe accounting for close to 98 percent of sold quantities (Figure 30).

## 3.2 Europe

### A. Current market situation

The European Union and Switzerland account for over 97 percent of fair-trade banana sales worldwide. The European Union alone imported over 200 000 metric tonnes of Fairtrade

**Figure 30 - Main markets for fair-trade bananas (in percentage of sales volume in 2007)**



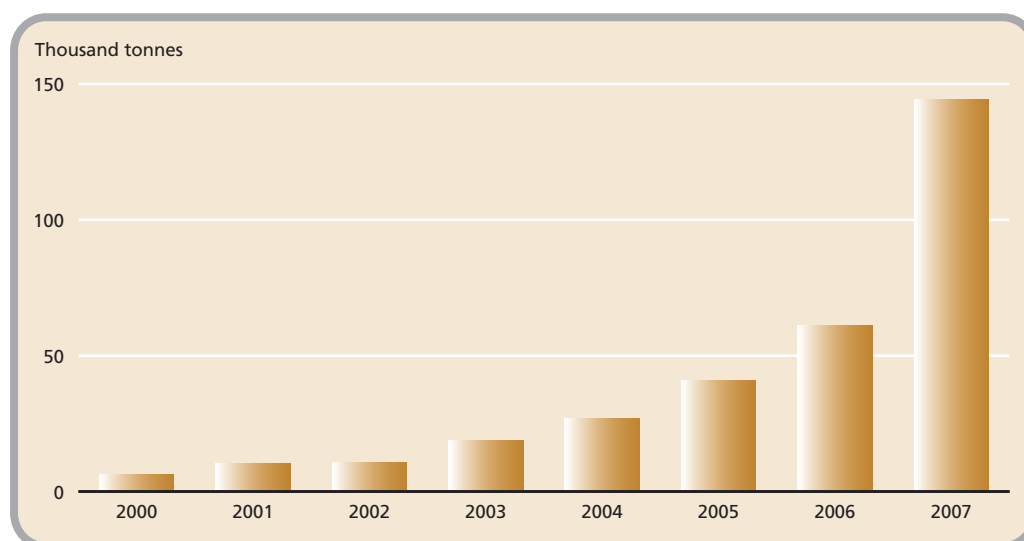
Sources: author's calculation based on FLO (2008) and other sources for Japan

certified bananas in 2007, accounting for 85 percent of world imports.

In the European Union, the largest market is by far the United Kingdom, followed at a distance by Germany, Finland, France, Austria and Belgium (Figure 30). In the **United Kingdom**, sales of Fairtrade bananas have soared since 2002 (Figure 31). Over 60 000 metric tonnes were sold in 2006, representing a consumption of 1 kg per person. Sales more than doubled over the year 2007, reaching 143 000 metric tonnes in 2007 according to FLO (i.e. 2.4 kg per capita). The above figure translates into an average market share in volume of close to 15 percent over the whole year (A. Smith, Bananalink, personal communication, 2008). A recent report claims that the market share was close to 22 percent in volume and 27 percent in value in the first half

of 2008 (Banana Link 2008). The doubling of Fairtrade sales in 2007 is primarily due to the decision of two leading UK retail chains (Sainsbury's and Waitrose) to carry Fairtrade bananas only. Unlike other European countries, the share of double certified bananas (organic and fair-trade) is relatively small: less than 10 percent of the Fairtrade bananas sold in the United Kingdom are also organic. The fair-trade system is vital to many Caribbean small growers who export to the United Kingdom. The sharp decline in retail prices in this market make fair-trade even more important to them. According to industry sources, the average retail price of loose bananas fell from £0.85 to 0.65 per pound from 2005 to 2008 (-21 percent over three years). The decline is mainly due to fierce price competition on bananas among the UK supermarket chains. The chains use the banana as a 'loss leader',

**Figure 31 - Quantities of Fairtrade bananas sold in the United Kingdom, 2000-2007**



Source: UK Fairtrade Foundation (2007) and FLO (2008)

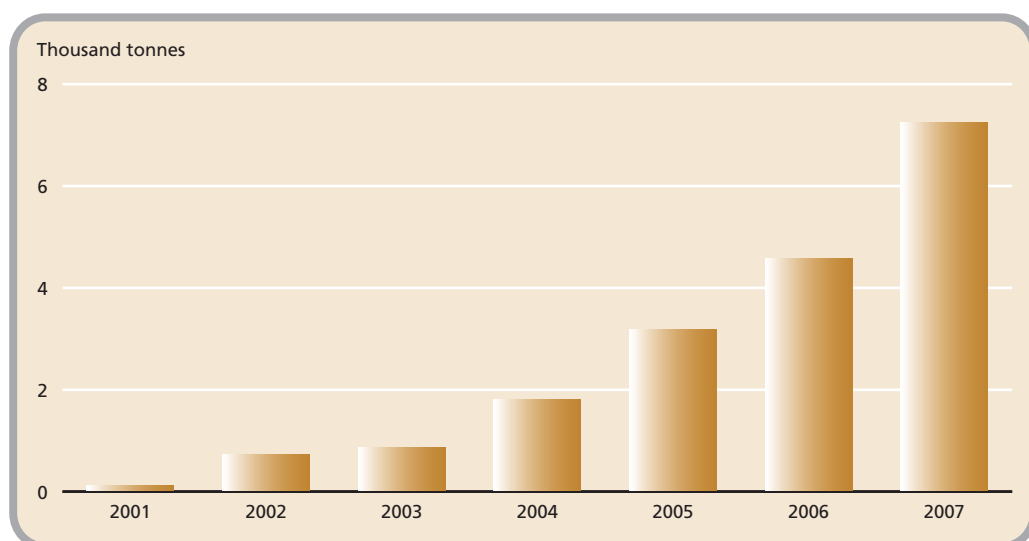
whereby heavy discounts on the fruit are meant to attract more clients into their stores. Fairtrade bananas have been somewhat insulated from the decline, although some critics have argued that retailers make exaggerated profits margins on them. The main supplier is the Windward Islands. There are several Fairtrade banana importers in the United Kingdom, but the company AgroFair UK has a predominant position.

**Germany** is the second largest market in the European Union in total volume terms (with 13 600 metric tonnes in 2007) but it ranks far behind other countries in terms of individual consumption: only 0.1 kg of fair-trade bananas was bought by the average German consumer in 2006. Fairtrade bananas have been on the German market for almost ten years but sales have failed to expand. Sources in the fair-trade movement indicate the strong control exercised by multinational fruit companies on the market as one of the reasons for this relative failure. Most Fairtrade bananas sold are also organic, reflecting the strong demand for organic foods by German consumers.

Since the introduction of Fairtrade labelled products. In **Finland** in 1999, fair-trade has become a well-known concept. A market study in August 2005 revealed that 83 percent of the Finnish population were aware of and knew the Fairtrade certification label (up from 73 percent one year earlier). The total turnover of Fairtrade labelled foods was estimated at €23 million in 2006. The estimated retail value of foods sold under the Fairtrade label grew from €7.6 million in 2004 to €22.5 million in 2006, nearly trebling over two years. The market share of Fairtrade bananas was 11 percent in 2007, up from 7 percent in 2005. With total sales of 7 300 metric tonnes, per capita consumption reached 1.4 kg in 2006. There was a moderate increase in 2007 to nearly 8 000 metric tonnes. Almost no Fairtrade bananas sold in Finland are also organic.

In **France**, the market for Fairtrade foods has expanded rapidly in recent years, with sales rising from €18 million in 2001 to €210 million in 2007 according to Max Havelaar France. Fairtrade bananas, which were launched in 2001, have enjoyed a similar trend. They are imported from Latin America (Ecuador, Peru and the Dominican Republic) and Ghana. Large fruit importers (e.g. Fruidor, Compagnie Fruitière/Dole and Katopé) and specialized organic importers (e.g. ProNatura) have a FLO license to import Fairtrade bananas. After three years of slow growth, imported volumes have expanded more rapidly since 2004

**Figure 32 - Sales of Fairtrade certified bananas in France, 2001-2007**



Sources: Max Havelaar France (2007) and FLO (2008)



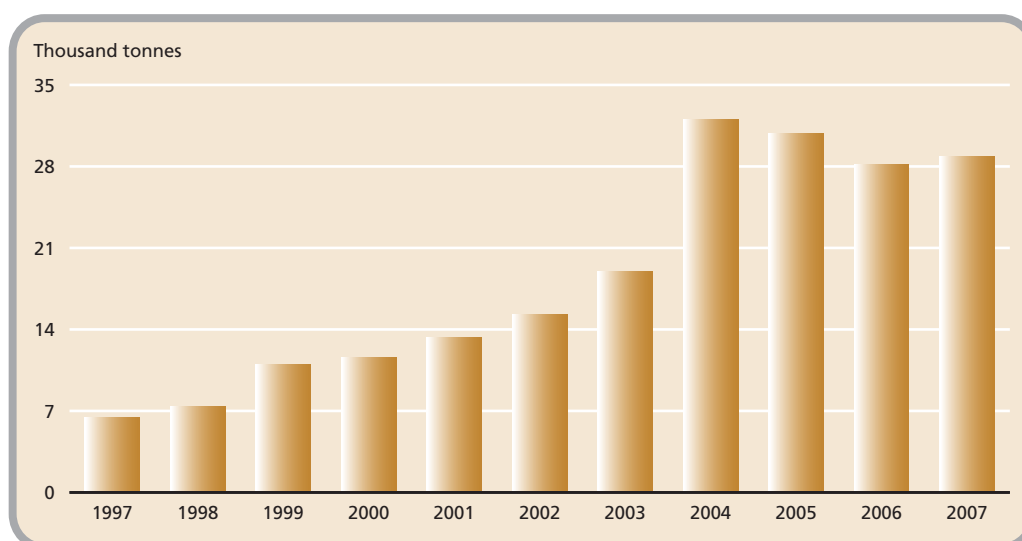
(Figure 32). Preliminary estimates indicate that sales soared in 2007, exceeding 7 000 metric tonnes (up 50 percent from 2006). This would translate into an average consumption of 0.12 kg per capita, i.e. less than 2 percent of total banana consumption. Nevertheless, this is a significant performance against the backdrop of a static conventional banana market. Almost all Fairtrade bananas found on the French market are also certified organic.

In **Austria** retail sales of Fairtrade certified goods were valued at €41.7 million in 2006, up from €25.6 million the previous year and €3.1m only in 2000. The most important fair-trade products sold in Austria are bananas, coffee and chocolate. Over 7 000 metric tonnes of Fairtrade bananas were sold in 2007, of which nearly 6 000 metric tonnes were also certified organic. Consumption was slightly above 0.8 kg per capita.

In **Italy**, approximately 4 000 metric tonnes of fair-trade bananas were sold in the period July 2006-June 2007 according to the Italian ATO CTM Altromercato (personal communication, 2007). More than two-thirds of this quantity were also certified organic. Most of the bananas are sold through a network of 1 300 World Shops under Altromercato's own label. A small quantity is sold through supermarkets under the FLO/TransFair Italy label.

**Switzerland** has long been the country where fair-trade bananas have the highest market share. Sales started already in 1985, when the ATO Gebana imported bananas from Nicaragua. Gebana stopped selling bananas when Max Havelaar Switzerland, a member of FLO, launched its certified Fairtrade bananas in 1997. The market expanded rapidly when the two Swiss supermarket chains, Coop and Migros, carried Fairtrade bananas in the early 2000s. Their policy was to sell these bananas with no (or a very low) price difference over conventional bananas. Sales soared in 2004 when Co-op decided to carry exclusively Fairtrade bananas. As a result, the volumes marketed stood above 30 000 metric tonnes annually in 2004 and 2005. Fairtrade bananas became the market leader, accounting for approximately half of all banana sales (FLO, 2007). However, Co-op's decision to sell again conventional bananas alongside the Fairtrade ones in 2006 caused a slight drop in sale quantities (Figure 33). Sales volumes remained almost unchanged in 2007 and were forecast to follow a similar pattern in 2008. Consumption per capita stood at 3.8 kg, by far the highest in the world. Of the approximately 28 000 metric tonnes sold in 2006, some 7 600 metric tonnes (27 percent) were also certified organic.

**Figure 33 - Quantities of Fairtrade bananas sold in Switzerland, 1997-2007**



Sources: Max Havelaar France (2007) and FLO (2008)

## B. Suppliers and marketing channels

Europe's main suppliers of fair-trade bananas are Ecuador, Peru, the Windward Islands, the Dominican Republic and Ghana. Several EU banana importers are fair-trade certified. The largest one is the Dutch company Agrofair, which is jointly owned by European NGOs and groups of Fairtrade growers in developing countries (Colombia, Costa Rica, Ecuador, the Dominican Republic, Ghana, Peru). Agrofair pioneered Fairtrade banana imports into the Netherlands in the late 1990s and has expanded strongly since then. It has sales units in the United Kingdom, Italy, France, Finland and the United States. Agrofair recorded a turnover of €62 million and a net profit of €944 000 in 2006 (Banana Link, 2008). Most of the European organic banana importers also import Fairtrade bananas. This is the case of ProNatura SA, Savid SA, Brochenin SA, Port International Organics GmbH and Daabon Deutschland GmbH. Several conventional banana importers such as the German company T-Port, the French company Pomona, the subsidiaries of Dole and Chiquita in Europe and the UK companies Pratt and Mack Multiple also import Fairtrade bananas.

## C. Market prospects

Fair-trade products are increasingly popular as consumers believe product purchases have a direct impact on third world poverty. According to Organic Monitor (2008), sales of fair-trade fruit and vegetables expanded by 92 percent in 2007. High growth is occurring as a number of European supermarkets commit to carrying fair-trade products. In Switzerland, the United Kingdom and Finland, the high market share is partly due to the strong involvement of a few leading supermarket chains: Sainsbury's, The Cooperative and Waitrose in the case of the United Kingdom; COOP in the case of Switzerland; and Kesko and Siwa in the case of Finland. The 2004 decision by COOP to carry exclusively Fairtrade bananas was followed by both Sainsbury's and Waitrose in the United Kingdom, which decided in 2006 that they would only sell fair-trade certified bananas from 2007 onwards. Another important factor has been the active mobilization of local fair-trade organizations and other NGOs that have carried out massive awareness raising and promotion campaigns aimed at both consumers and retailers. Fair-trade weeks or fortnights are now held at least once a year in many European countries. The market share of fair-trade bananas is still low in most European countries and there is potential for growth (Table 11). For example, the German market may expand rapidly if the discount store chain Lidl continues to carry this type of bananas. If the average German consumer had the same consumption as the Austrian consumer (0.8 kg per capita), sales would soar to 64 000 metric tonnes.

Nevertheless, the emergence of various ethical labels and other fair-trade claims across Europe is a potential obstacle to market growth, as may create confusion among consumers. Although certified fair-trade products have clearly visible symbols and logos, consumers may be confused by these claims and seldom understand the differences between them. The emergence of fair-trade standards developed by private certification bodies may increase confusion. Also, should the current economic crisis deepen and endure, some consumers may switch to cheaper fruit than fair-trade bananas.

**Table 11 – Individual Fairtrade banana consumption in selected European countries in 2007**

| Country       | Switzerland | UK  | Finland | Austria | Germany | France | Italy |
|---------------|-------------|-----|---------|---------|---------|--------|-------|
| kg per capita | 3.8         | 2.4 | 1.4     | 0.8     | 0.17    | 0.12   | 0.10  |

### 3.3 North America

#### A. Market situation

Bananas account for the bulk of fair-trade certified fruits in the North American market, but sales have failed to meet the high initial expectations of fair-trade organizations so far. Fairtrade bananas were introduced into the North American market in 2004. However, import volumes into the United States have stagnated since then, totalling only 3 000 metric tonnes in 2007 (Table 12). This last figure compares with sales of over 200 000 metric tonnes in Europe. Some Fairtrade bananas were re-exported from the United States and sold on the Canadian market in 2004 and 2005, but sales have stopped since 2006. The value of sales in North America was estimated to be below USD 5 million in 2007.

**Table 12 - Sales of Fairtrade bananas in the United States and Canada (metric tonnes)**

|        | 2004  | 2005  | 2006  | 2007  |
|--------|-------|-------|-------|-------|
| USA    | 3 700 | 3 300 | 2 600 | 3 000 |
| Canada | 184   | 239   | 0     | 0     |

Source: FLO (2007)

According to TransFair USA, the logistical challenges of shipping small quantities and the inspection period at US ports have created quality problems for Fairtrade bananas<sup>16</sup>. Fairtrade bananas are shipped to Europe in larger quantities and are packaged in vacuum bags, which help to preserve freshness. The quantities shipped to North America remain relatively small, and vacuum bags are unpopular with US buyers. Growth in the fair-trade certified banana market is further limited by the fact that the North American banana market is dominated by three large firms (Chiquita, Del Monte and Dole). Supermarkets tend to have long-term exclusive contracts with one of these companies, which make it virtually impossible for other firms to sell bananas to North American supermarkets (TransFair USA, personal correspondence).

Most of the Fairtrade bananas imported into North America are also certified organic. The share of organic bananas in Fairtrade banana imports rose from 73 percent in 2005 to 94 percent in 2006. In 2004 and 2005, all Fairtrade bananas were imported from Ecuador and Peru, and in 2006 Colombia also became a source of supply (TransFair USA, 2006). Ecuador is among the leading suppliers of fair-trade bananas worldwide.

According to TransFair USA, the 2 600 metric tonnes of Fairtrade bananas imported in 2006 generated an additional income (through the fair-trade premium) of USD 1.2 million to six farmer groups in the three supplying countries.

#### B. Market prospects

In spite of the stagnation of imports due to logistical problems among others, North American imports of fair-trade fruits should reach more meaningful levels in the longer

<sup>16</sup> Ocean freight for smaller shipments of bananas costs roughly twice as much and takes twice as long, which increases costs and compromises freshness. For example, in 2004 fair-trade certified bananas were shipped from Ecuador to the West Coast of the United States, but quality problems arose because shipping and customs agricultural inspections were taking up to 30 days. – Transfair USA, personal correspondence.

run. The fair-trade NGOs will need to overcome a series of obstacles. The key constraint is the lack of awareness by North American consumers. Further, supermarket category managers are often reluctant to add yet another fruit category to their range, as they view it as extra work for very little profit due to the small quantities. In the case of pineapples and bananas, exclusive arrangements between supermarkets and the fruit multinationals are a further impediment. Collaboration between the multinational fruit importers and fair-trade organizations may help expand the market for fair-trade bananas and pineapples, but it is not clear whether these players are willing to work together. Yet, the considerable success of Fairtrade bananas in Europe indicates that there is potential for growth in the North American market. If North American fair-trade organizations manage to raise consumer awareness and pressure supermarkets into carrying fair-trade foods as their European counterparts did, demand for fair-trade fruits could soar. In the United Kingdom, Fairtrade bananas accounted for over 20 percent of banana sales by the end of 2007 due to the decision by a few large-scale retailers to only sell this type of bananas. Similarly, in Switzerland, Fairtrade bananas account for 40 percent of banana sales. Recently, the non-profit consumer cooperative Co-op America took the initiative to ask its consumers to pressure major retail chains to make fair-trade bananas more widely available in their stores. Co-op America justified its initiative due to “growing concerns about the human rights and environmental records of large conventional banana companies” (Banana Link, 2008).

Another factor that supports strong growth prospects for fair-trade bananas in North America is the fact that other fair-trade products have experienced rapid expansion in this market. Sources from the fair-trade sector believe that the market will grow, although perhaps not as rapidly as the market for other fair-trade products (coffee and cocoa, for example).

### 3.4 Asia and the Pacific

#### A. Market situation

At the time of writing this report, Japan was the only country of the Asia-Pacific region that imported fair-trade bananas. There is a lack of recent data on fair-trade product sales in Japan. According to information received from IFAT, total sales of fair-trade products (including FLO-labelled and other fair-trade goods) stood at USD 17.5 million in 2004 (Table 13).

There is a lack of data on Japanese imports of fair-trade bananas. The volumes are estimated to be small, probably below 10 000 metric tonnes annually, accounting for less than 1 percent of Japan’s total banana imports. Most of these imports are done by alternative trade organizations that do not belong to the FLO system.

**Table 13 - Total sales of fair-trade products in Japan 2001-2004 (in USD million)**

| Year                        | 2001 | 2002  | 2003  | 2004  |
|-----------------------------|------|-------|-------|-------|
| IFAT members (non FLO)      | 9.9  | 11.3  | 14.16 | 14.85 |
| Fairtrade Label Japan (FLO) | 0.9  | 0.85  | 1.49  | 2.66  |
| Total sales                 | 10.8 | 12.15 | 15.65 | 17.51 |

Source: IFAT (2008)

## B. Suppliers and marketing channels

Japan's principal supplier of fair-trade bananas is the Philippines, which is by far its main supplier of conventional bananas.

The main alternative trading organizations that import fair-trade goods into Japan are Alter Trade Japan, Global Village, better known today under its brand "People Tree" and Nepali Bazar. Fair-trade bananas are primarily imported by Alter Trade Japan (ATJ), an alternative trading NGO which is part of the Alter Trade Group. It does not belong to the FLO system. Alter Trade Japan started in 1987 as a joint activity of consumers' cooperatives, organic produce traders and citizen's groups. It was meant to complement the activities of the Japan Committee for Negros Campaign, an NGO involved in relief work for the sugar-dependent Negros Island, the Philippines, where many jobless sugar cane workers were suffering from hunger. Its aim was to secure incomes by setting up new export and distribution channels for the Negros sugar, including sales to consumers' groups in Japan. Since then Alter Trade has extended its range of products and the number of countries where products are sourced from (e.g. coffee from Peru and Mexico). Much of this work has been done in close cooperation with the UK-based fair-trade organization TWIN. Today Alter Trade Japan is a Tokyo-based organization that focuses on Asia, both through its offices abroad (like in Surabaya, Indonesia) and its product development initiatives in neighbouring countries (e.g. organic shrimp project in Indonesia, coffee projects in Timor-Leste and Lao People's Democratic Republic).

ATJ has sourced bananas from small producers in the Negros Islands of the Philippines since 1989. Over time, procurement has been extended to other areas (Northern Luzon, Panay, Bohol and Cavite). These bananas (a local variety named balangon) are cultivated without chemicals but do not bear any organic label. They are exported by the ATO Alter Trade Philippines and imported into Japan under the Teikei system, a Japanese participatory guarantee scheme to ensure the integrity of organic foods without using certification. ATJ sells mainly to consumer cooperatives. Its main customers are the consumers' cooperatives Green Co-op, Palsystem, and Seikatsu. In 2004 it reported sales of nearly ¥500 million (World Bank, 2004). The author could not find any recent data on quantities. According to IFAT, in 2004 (the year of the latest available figures) Alter Trade Japan had an annual turnover of about ¥2 billion (USD 18.5 million).

FLO's Japanese member is an NGO named Fairtrade Label Japan. It was established in 1993, originally under the name TransFair Japan, but changed its name in 2004. In 2006, Fairtrade Label Japan started using the FLO Fairtrade label on bananas sold in the Japanese market for the first time. There is no evidence that sales of Fairtrade bananas have taken off so far. The annual volumes sold in 2006 and 2007 were below 300 metric tonnes.

## C. Market prospects

### *Japan*

Although it has a large population with a high purchasing power and imports a large share of its foods, Japan still lags behind other developed countries in the development of its market for fair-trade products. While, according to IFAT, retail sales of Fairtrade-labelled products grew from an estimated USD 3.4 million in 2004 to USD 6 million in 2006, the market share of fair-trade remains almost negligible. The average per capita expenditure amounts to less than USD 0.05 and remains the lowest of all national label initiatives under the FLO system. The growth rate of sales during the period 2001-2004 was much below that of the European market.

Several researchers have tried to identify the reasons for this slow development. Ikegami and Uyama (2006) from the Kinki University in Osaka present two possible explanations:

(a) that there seems to be no common understanding of what fair-trade is and should be between different types of fair-trade organizations in Japan, and (b) that there has not been any reliable market research on the potential of labelled food products on the Japanese market.

However, the decision of several prominent large-scale retailers such as Aeon Corp., Japan's largest retail group, and Starbucks Japan to start selling Fairtrade labelled coffee since 2006, has increased the sales and is expected to be a key driver of market expansion.

### **Australia and New Zealand**

While currently no fair-trade bananas are imported into Australia and New Zealand, the situation may change in the future, as both countries have market potential. Since the creation of the **Fair Trade Association of Australia and New Zealand** (FTAANZ) and the subsequent introduction of the Fairtrade label, the market has grown rapidly. The combined retail sales of Fairtrade products in the two markets were valued at nearly USD 16 million in 2007 (Table 14), a 59-percent rise over the previous year<sup>17</sup>.

**Table 14 - Sales of Fairtrade products in Australia and New Zealand 2004-2006**

| Year                       | 2004 | 2005 | 2006 | 2007 |
|----------------------------|------|------|------|------|
| Retail sales (USD million) | 0.9  | 3.1  | 8.9  | 15.9 |

Source: FLO (2008)

In Australia alone, sales of Fairtrade-labelled products rose 50 times between 2003 and 2006, reaching an estimated \$A8 million (USD 6.3 million) (Oxfam Australia, 2007). At the end of October 2007 FTAANZ had 123 business partners licensed to sell Fairtrade-labelled

products in Australia. The vast majority of licensed partners are engaged in coffee, and this product alone accounts for more than 80 percent of the organization's license income. In Australia Fairtrade-labelled products can now be found in many places, including national supermarket and retail chains such as Coles Supermarkets or the 1 500 Woolworth's supermarkets. Large domestic companies such as Origin Energy, Orica Australia and Lonely Planet have introduced Fairtrade coffees and teas in their offices.

In New Zealand, Fairtrade sales were valued at \$NZ3.98 million (USD 2.7 million) in 2006. This represents a 400 percent increase over the previous year. Fairtrade coffee accounts for about 90 percent of those sales, with tea and cocoa products representing most of the remainder.

The market potential however is much higher. This can be induced from the per capita consumption figures when comparing sales with other developed countries. Consumption of Fairtrade products in the United States and Canada are almost five times as high as in Australia and New Zealand, and in many European countries consumption levels are even much higher.

New Zealand could offer market opportunities for fair-trade bananas in the short term. It imported over 80 000 metric tonnes of fresh conventional bananas in 2006. In Australia, the ban on imports of fresh bananas for phytosanitary reasons is a major constraint. However, the Philippines has been negotiating access to the Australian market for years and it is not impossible that an agreement will be reached in the future. In this case local farmer organizations could be allowed to export fair-trade bananas to Australia.

<sup>17</sup> Figures taken from the Annual Reports of Fairtrade Labelling Organizations (FLO) International.

CHAPTER IV:  
THE BENEFITS AND CHALLENGES  
OF CERTIFICATION AND PRICE  
DISTRIBUTION IN THE VALUE  
CHAIN

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The previous chapters have reviewed the use of voluntary standards in the banana industry and analysed the supply and demand of organic and fair-trade bananas. This chapter examines the various benefits and challenges associated with the production and export of organic and fair-trade bananas from the perspective of developing countries. It starts by examining the direct economic benefits to exporters by comparing export prices for certified and conventional bananas. It goes on to review the challenges to comply with standards and obtain certification. The indirect benefits to grower groups and exporting countries are then discussed. The second part of the chapter analyses the distribution of prices along the supply chain to compare exporter prices with those of the other operators down the chain. This is done by first analysing regional data referring to 2004 and then studying two countries exporting organic bananas in more recent years. The findings are then summarized and discussed.

## 1. BENEFITS AND CHALLENGES FOR EXPORTING COUNTRIES

### 1.1 Value chains and market structure

The benefits that developing countries can reap from exporting bananas depend to a large extent on the value chain within which their growers and exporters operate and who controls it. There are different levels of integration in the value chain for fresh bananas as illustrated below (Box 1). While the traditional chain (a) is common for many tropical fruits, the bulk of export bananas is traded through the types (b) and (c) integrated chains. The international trader can be a multinational fruit company or a large national company such as Noboa in Ecuador or Uniban in Colombia. In the most integrated version (c), the trading company also produces part or all the bananas it exports. This has been typically the case of multinational banana companies ever since large-scale banana exports started at the beginning of the twentieth century. They perform directly the operations of export, import, ripening and distribution, and produce in their own plantations a sizeable share of the bananas they trade. The rationale was to ensure fruit quality and guarantee supply at stable prices. Vertical integration enabled trading firms to command the value chain and capture a large share of the added value, as well as to control service activities (shipment, ripening, distribution) that were more profitable than production. While the multinationals have had a tendency to partly divest from production since the 1990s against a backdrop of production surplus (FAO, 2003b), they still control a significant proportion of the fruit they trade.

In Latin America the fair-trade chain is also highly integrated, in line with the approach of fair-trade to reduce the number of intermediaries in order to maximize the returns to farmers. Usually a grower group packs and exports the fruit to a specialized fair-trade importer (such as Agrofair in the European Union) or a conventional importer who holds a FLO license. The importer ripens (directly if it owns facilities or through contracting) the bananas and sells them directly to retailers or other large clients. The organic chain often has a similar level of integration, although the less integrated form (b) is not uncommon.

The global market for conventional bananas is strongly concentrated both geographically and in terms of firms. Geographically, industrialized countries account for over 80 percent of world banana imports, with the European Union and North America capturing some 60 percent and Japan and the former USSR countries another 12 percent. In terms of market players, banana trade was run by an oligopoly for decades, with the leading three multinational companies (Chiquita, Dole and Del Monte) accounting for nearly two thirds of

## Various types of banana value chains

### a) Traditional chain

Grower -> Packer/Exporter -> Importer -> Ripener -> Wholesaler/Distributor  
-> Retailer

### b) Integrated conventional chain

Grower -> Trading company (Packing/Exporting/Importation/Ripening/Distribution)  
-> Retailer

### c) Highly integrated conventional chain

Fruit company (Growing/Packing/Exporting/Importation/Ripening/Distribution)  
-> Retailer

### d) Integrated fair-trade or organic chain

Grower group (Growing/Packing/Exporting) ->Specialized importer (Imports/Ripens/  
Distributes) -> Retailer

global exports in 1980. These firms predominate in North America, with close to 90 percent of the market and hold close to half of the Japanese and European Union markets.

## 1.2 Economic benefits and costs

### A. Export prices

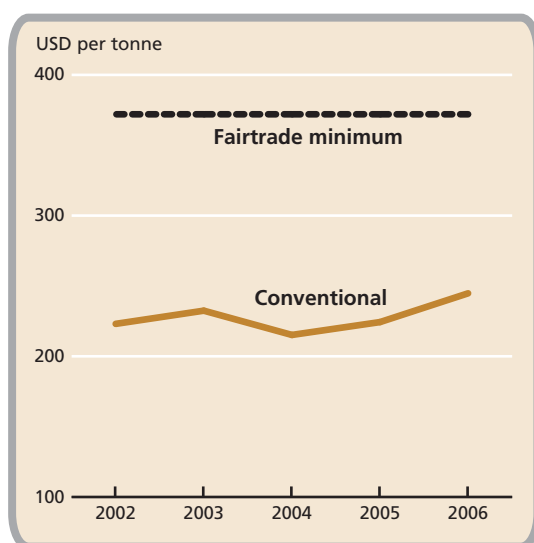
#### *Fair-trade*

The benefits of Fairtrade bananas to developing country growers are built in the FLO system, which guarantees a Fairtrade Minimum Price and pays an additional premium. The minimum price depends on the country of origin and on whether the fruit is organic or not, as detailed in Table 15. The premium paid in addition to the minimum price is USD 1 per box of 18.14 kg (40 lbs). In order to assess the economic benefits of fair-trade to exporting countries, it would be interesting to compare the fair-trade price with the FOB price for each country. However, real FOB prices are seldom available because traders consider them as confidential information. What national statistical agencies usually publish as FOB prices is the average unit value of total banana exports. Table 15 displays these unit values as a proxy for FOB prices. It is interesting to note that the fair-trade minimum FOB price is substantially higher than the average unit value of exports for all countries except Peru. This specific case can be explained by the fact that all bananas exported from Peru are organic and therefore fetch premium prices. The difference between Fairtrade minimum FOB price and unit value of export varies widely across countries.

Figure 34 shows that the FLO minimum price was consistently higher than the estimated FOB price in Ecuador over the period 2002-2006, with a difference of more than USD 120 per metric tonne.

The above finding is supported by a study by Kilian *et al.* (2005) who analysed the impacts of Fairtrade and organic certification on producer prices in two major producing countries: Costa Rica and Ecuador. Ecuador is known for its competitiveness in banana production while Costa Rica is known for its high production costs. They first examined FOB prices, which they consider as indicators for the producer prices, over the period 1990-2004. They

**Figure 34 - Unit value of exports of conventional bananas and minimum Fairtrade FOB price for Ecuador**



Sources: FAOSTAT, Comtrade and FLO

found that Fairtrade minimum prices are set above the average FOB price observed in both countries over the period considered. Fairtrade minimum FOB prices were set at USD 6/box for Costa Rica and at USD 5.25/box in Ecuador. On the other hand, prices for banana experienced large fluctuations, which ranged, since 1990 in the case of Costa Rica, between a low of USD 3.30/box at the end of 1999 and a high of USD 6.20/box in 1997, with an average being USD 5.17/box. Banana prices in Ecuador exhibited smaller fluctuations; the lowest prices were around USD 4/box and the highest around USD 6/box, with an average of USD 4.88/box. While in both cases the Fairtrade price was higher than the average conventional banana price, in the case of Costa Rica the difference between the average FOB price and the Fairtrade minimum price (about USD 0.80/box) was much higher than in Ecuador (around USD 0.40/box)<sup>18</sup>. When adding the Fairtrade price premium to the minimum Fairtrade price, the average FOB price paid by companies trading Fairtrade products amounted to USD 8.60/box.

**Table 15 - Minimum prices for FLO-certified fair-trade bananas (USD per 18.14-kg box, 2006)**

| Origin           | Fairtrade minimum price (farmgate) |         | Fairtrade minimum price (FOB)  |         | Average unit value of exports | Diff. % with Conventional FOB |
|------------------|------------------------------------|---------|--------------------------------|---------|-------------------------------|-------------------------------|
|                  | Conventional                       | Organic | Conventional                   | Organic |                               |                               |
| Colombia         | 5.50                               | 7.25    | 6.75                           | 8.50    | 5.61                          | 20.3                          |
| Costa Rica       | 5.75                               |         | 6.75                           |         | 5.33                          | 26.6                          |
| Dominican Rep.   | 7.00                               | 8.50    | 8.50                           | 10.00   | 4.43                          | 91.9                          |
| Ecuador          | 5.50                               | 7.25    | 6.75                           | 8.50    | 4.44                          | 52.0                          |
| Ghana            |                                    |         | 8.00                           | 10.00   |                               |                               |
| Jamaica          |                                    |         | 9.06<br>(free along-side ship) |         | 7.60                          | 19.2                          |
| Panama           | 6.00                               |         | 7.00                           |         | 4.60                          | 52                            |
| Peru             |                                    | 7.00    |                                | 8.50    | 8.58*                         |                               |
| Philippines      | 6.00                               |         | 7.50                           |         |                               |                               |
| Windward Islands | 7.60                               |         | 9.00                           |         |                               |                               |

Source: FLO (2007) and FAOSTAT (2008)

Note: (\*) organic only

<sup>18</sup> The situation has changed since then, as FLO subsequently raised its minimum Fairtrade price for Ecuador to the same level as in Costa Rica (see Table 15).

According to FLO (2007), the 28 Fairtrade-certified banana producer organizations (spread across 10 countries) earned an estimated extra income of USD 21 million (€15 million) in 2006. Beside the higher FOB price level, the price stability guaranteed by Fairtrade is equally important. Over time the FLO system guarantees a stable minimum remuneration when prices fluctuate widely in international markets. This enables growers to plan and make investments for medium- and long-term development. These investments usually contribute to the preservation of natural resources and social improvements in the community (e.g. health and education).

### Organic bananas

Unlike fair-trade, organic agriculture is primarily a standard for the production process and there is no built-in system to ensure a minimum remuneration to growers (i.e. no guaranteed price or premium). The profitability of organic production is determined to a large extent by the market. Assessing the direct financial benefits of organic banana cultivation is therefore more difficult. The above study found that while initially in the early 1990s, organic banana FOB prices often ranged above USD 15/box, prices decreased considerably due to continuous growth of organic banana production all over Latin America. FOB prices for organic banana in the region in 2004 amounted, on average, to USD 7/box, but were still above conventional banana prices. While prices in Ecuador ranged between USD 6-7/box, the Dominican Republic achieved up to USD 8 or higher. It found a higher price for double certified Fairtrade and organic bananas. Average FOB price for these bananas was around USD 10.50/box, while in the specific case of Ecuador, identified prices in 2004 were around USD 9.50/box.

More recently, in 2007 the average export value in the Dominican Republic was USD 7.14/box for organics, compared with USD 5.73/box for conventional bananas, i.e. a

**Table 16 – Dominican bananas: unit values of export and price premium at export level 2004-2007**

|      | Organic<br>(USD/<br>box) | Conventional<br>(USD/box) | Price<br>premium<br>(%) |
|------|--------------------------|---------------------------|-------------------------|
| 2004 | 4.70                     | 3.17                      | 48.0                    |
| 2005 | 6.77                     | 3.83                      | 76.8                    |
| 2006 | 5.42                     | 4.43                      | 22.3                    |
| 2007 | 7.14                     | 5.73                      | 24.7                    |

Source: CEI-RD (2008)

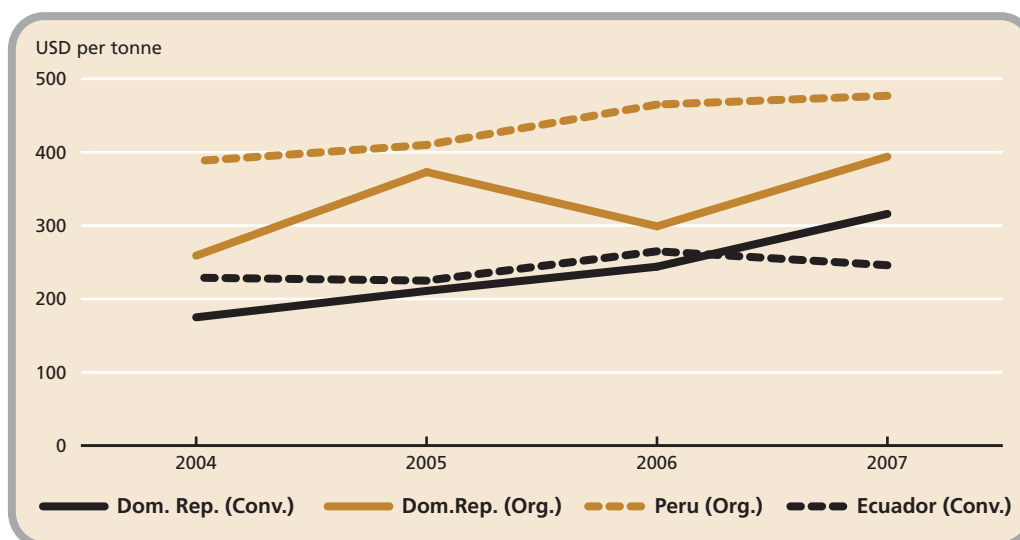
**Table 17 – Unit values of export for bananas from Ecuador and Peru (USD/box)**

|      | Peru<br>organic | Ecuador<br>Conventional |
|------|-----------------|-------------------------|
| 2004 | 7.04            | 4.15                    |
| 2005 | 7.44            | 4.08                    |
| 2006 | 8.44            | 4.81                    |
| 2007 | 8.65            | 4.46                    |

Sources: PromPex and COMTRADE (2008)

price premium of 25 percent. The premium varied between 22 and 77 percent over the period 2004-2007 (Table 16). In Peru the average export value was USD 8.43/box in 2007. Peru exports organic bananas only so it is not possible to calculate an organic price premium. However, a comparison with Ecuador may be useful, as both countries are located in the same geographical area and have similar climatic conditions. Over 95 percent of Ecuadorian banana exports are organic, so the comparison in Table 17 may give some indications on the price difference between organic and conventional bananas produced in the same region of the world. The average export value of a box of conventional Ecuadorian bananas was USD 4.47. More details are provided in the case studies of the Dominican Republic and Peru in section 2.2 below.

Figure 35 offers a direct comparison of estimated export prices over a recent period using unit values of exports as proxy. It is interesting to observe that Peruvian organic bananas fetch much higher prices than

**Figure 35 – Unit values of banana exports from selected suppliers, 2004-2007**

Sources: PromPex and COMTRADE (2008)

those from the Dominican Republic. Also, the former have seen their price rise steadily while the price of the latter has fluctuated considerably over time. This difference may result from the weather instability in the Caribbean island, where hurricanes and torrential rains may lead to fruit quality problems more frequently. Unsurprisingly the prices of organic bananas from both countries are above those of Ecuadorian bananas, reflecting partly the organic price premium. However, it was not expected to find prices for conventional bananas from the Dominican Republic so similar to those of Ecuador. The latter is known as a low-cost supplier, whereas banana production tends to be more costly in the Caribbean.

## B. Costs

### *Organic bananas*

The higher FOB prices for organic bananas do not necessarily translate into net gains for exporting countries, as they also reflect higher costs. The strict technical requirements of organic agriculture standards may raise production costs, especially during the transition period.

A review of case studies (FAO, 2003a) found that traditional low-input farmers may expect yield gains from conversion to organic agriculture methods. However, higher yields are usually accompanied by higher production costs, mainly in the form of increased labour demand. In particular, the introduction of new soil conservation methods, such as terracing and preparation of organic fertilizers, were often mentioned as increasing total labour demand. If soils were depleted under former land use management, these labour requirements can be expected to be higher. On the other hand, the organic price premium received usually covers these higher production costs and certification results in increased net profit. When converting low-input farms, the increase in productivity might in itself compensate higher production costs. For land that was cultivated without chemicals, the usual three-year conversion periods may be shortened or waived completely if the certification body is satisfied by evidence of former low or non-use of chemical inputs. This is an important advantage, leading to quicker returns on investments and less risk that price premiums will have fallen by the time certification is obtained.

In the cases of conversion from high-input production systems, initial yield declines are often observed, usually recovering to levels slightly below the original conventional

yields. Effects on production costs per hectare have been varied (lower, similar and higher). Organic cultivation of bananas requires technical skills and investment in time. Some tropical diseases, in particular Black Sigatoka, are difficult to combat with organic methods. They require constant monitoring and labour. In view of the initial investments and decline in yields, access to premium markets is essential – usually requiring certification. In all cases, returns on investments in organic agriculture, especially in soil conservation methods and in conversion from high-input situations, occur in the long term only. Tenants and sharecroppers without a guarantee of continued access to the land are unlikely to make this investment.

Certification costs are a key determinant of the profitability of organic banana cultivation. For small growers, the use of group certification involving an internal control system is important to reduce these costs. Developing internal control systems requires institutional changes in farmer organizations to. Group certification can be achieved in two distinct ways. First, through associations, with farmers participating actively in decision-making and monitoring, in which cases the certificate is owned by the association. In the second system the exporter organizes and pays for the certification. Kidd, Tulip and Walaga (2001) argue that although this has the disadvantage that farmers are not allowed to sell to other organic buyers (but they are allowed to sell to any conventional buyer), this option is preferable where producer organizations do not exist or are weak. It has often been observed that the quality requirements of the new organic market are higher than for the former conventional market. In a case study of the Dominican Republic, price premiums were apparently not sufficient to justify the necessary investments to significantly improve the quality of organic bananas grown by small-scale producers, and it was difficult for them to compete in the increasingly demanding international organic market.

The absence of reliable data on the costs of organic banana production makes it impossible to calculate the profits of exporters and growers. Further research is needed in this area through case studies.

### **Fair-trade bananas**

The main costs entailed by fair-trade derive from the need for farmer groups to modify their internal organization and workings. Similarly as in organic agriculture, Fairtrade certification requires institutional changes in farmer organizations to develop internal control systems. Some organizational changes such as the need for holding general assemblies more frequently, record keeping, hiring independent accountants, etc. are likely to raise overhead costs. Yet, there are reasons to believe that growers selling their bananas under the FLO system may obtain higher margins than organic growers. First, FOB prices tend to be higher and there is a relatively good price transmission from the exporter to the grower, as many Fairtrade groups export directly. When this is not the case, the FLO system ensures that the exporter's margin is not excessive. Second, FLO has a special fund that may partly subsidize the cost of certification at least in the first years. Finally, the environmental requirements of FLO on production methods are less demanding than those of organic farming standards. Fair-trade standards do not pose the same technical challenges to banana cultivation as organic agriculture. In particular, the use of chemical fertilizers and pesticides is allowed. Growers may combat potent fungal diseases such as Sigatoka with synthetic fungicides. Therefore, yields are likely to be higher than in organic cultivation.

### **1.3 Other benefits and challenges**

The previous section focused on the direct economic benefits that accrue to developing countries exporting organic and/or fair-trade bananas. Beyond these direct benefits, certification offers other types of non-financial advantages. Better and more stable market access ranks high among these. Furthermore, the organizational changes needed to

comply with the standard and certification requirements may yield significant benefits in the long run. They may help them rationalize production and cut input costs (for example through a more efficient use of agrochemicals in fair-trade cooperatives). Traceability and better record keeping may improve the management of the supply chain. Complying with standards may improve market access through enhanced product quality and improvement in the image of the farm or company.

Compliance with the strict environmental requirements of organic standards may improve the management of natural resources on which farmer livelihoods depend. They may enhance the farmer's relations with the local community, including its suppliers and lenders. Although they are difficult to quantify in financial terms, these benefits may be significant<sup>19</sup>. More broadly, organic farming generates a wide range of public goods including the preservation of natural resources (water, air, soil, biodiversity), maintaining amenities, and reducing health problems caused by agrochemicals.

Although farmer cooperatives often decide to seek fair-trade certification because of the guaranteed price premium, case studies (FAO, 2003a) show that other benefits derived from the fair-trade system may be more significant in the long run. The success in self-organization seems to be far more important, resulting in better bargaining positions, better credit worthiness and economies of scale. The fair-trade system contributes to these organizational successes through capacity building, an initial guaranteed market, linkages with the international market and learning-by-doing in exporting. In addition, and similarly to the organic case studies, fair-trade contributes to quality improvements. The labour criteria of fair-trade standards may reduce worker turnover, absenteeism and accident and sickness rates, thereby reducing costs and raising productivity. They may lead to better health conditions for farmers and farm workers.

The reported general lack of knowledge about fair-trade among individual members of large cooperatives has been mentioned as a challenge to the future development of fair-trade. One could have doubts regarding the "effective democracy" of large cooperatives, and suspect the emergence of a new "management class". The latter is not necessarily a negative development. Any organization would benefit from having professional management, as long as it is effectively and democratically controlled by the members.

## 2. DISTRIBUTION OF PRICES ALONG THE SUPPLY CHAIN

Theoretically, the extra costs generated by adopting organic or fair-trade standards are supposed to be more than offset by the price premium that consumers pay when purchasing bananas with a sustainable agriculture label. However, the percentage of the premium that trickles down to exporting countries is unknown. Some studies have argued that price distortions along the value chain substantially affect the distribution of the benefits generated by sustainable production, favouring downstream operators in importing countries instead of the production sector. Consequently, it is important to analyse the distribution of prices along the supply chain. This is the objective of this section. It starts by examining data for Latin America and then focuses on two countries exporting certified bananas.

There are very few studies on the value chain for certified bananas. The main obstacle is the lack of reliable data on prices and costs at the various stages of the chain. No

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<sup>19</sup> For a literature review of the impacts of certification in agriculture see FAO (2003a and 2008).

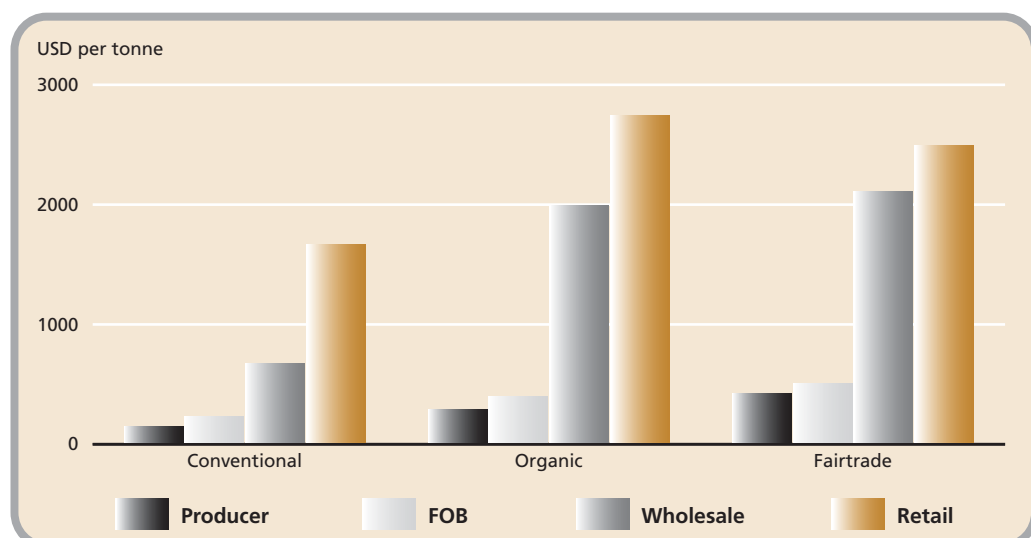


public-sector institutions collect or publish them. As for firms, they consider them as confidential information and will not disclose them. The distribution of value among operators is a sensitive issue. Each operator along the chain competes with the others to maximize its price and profit. The share of the consumer price that operators receive reflects to a large extent their bargaining power. For the Fairtrade system, FLO's official minimum prices are available at farmgate and FOB levels but actual prices received by growers or exporters are unknown when the market price is higher than the guaranteed minimum. For organic bananas, very few farmgate, FOB or import price data are available publicly, although the Sustainable Markets Intelligence Center (CIMS) based in Costa Rica does collect some market information. Elsewhere, a handful of importing countries have started publishing wholesale or retail prices very recently. Due to the absence of data on distributors' prices, wholesale prices will be used as a proxy, even though a limited share of bananas are traded through wholesale markets.

## 2.1 Regional studies

Using data for 2004 collected by CIMS, Kilian et al. (2005) examined the prices of certified and conventional bananas from Latin American origins at grower, FOB, wholesale and retail levels. Figure 36 shows the prices at various stages of the supply chain for Latin American bananas exported to Europe in 2004. As can be observed, the difference between the producer and FOB levels was relatively small. It was higher for conventional (60 percent) than for organic (40 percent) and fair-trade bananas (20 percent). The highest difference was between the FOB and wholesale levels (Table 18). In particular, there were very large differences for organic and fair-trade (414 percent and 322 percent respectively) leading to price differentials of more than USD 20/box. Although it was lower, the price difference for conventional fruit is also high in absolute value (200 percent). These high differences can be partly explained by the lack of data for import prices. It would have been useful to insert the import stage between the FOB and wholesale ones. It can be assumed that the high difference partly reflects transportation costs between Latin America and Europe and between the harbour and wholesale markets within Europe. It also reflects the payment of an import license, since the importation of bananas into the European Union was governed by a tariff quota system based on past imports ('historic references') at the time of the above study (FAO, 2004). Most European importers of certified bananas were newcomers and

**Figure 36 - Prices for organic, Fairtrade and conventional bananas along the supply chain to Europe in 2004**



Source: elaborated by the author from Kilian et al. (2005)/CIMS



**Table 18 - Percentage price differences along the supply chain Latin America to Europe (2004)**

| Banana type  | Diff. Grower to FOB % | Diff. FOB to wholesale % | Diff. wholesale to retail % | Producer/Retail % |
|--------------|-----------------------|--------------------------|-----------------------------|-------------------|
| Conventional | 60                    | 200                      | 150                         | 8                 |
| Organic      | 40                    | 414                      | 38                          | 10                |
| Fair-trade   | 20                    | 322                      | 18                          | 17                |

Source: elaborated by the author from Kilian et al. (2005)/CIMS

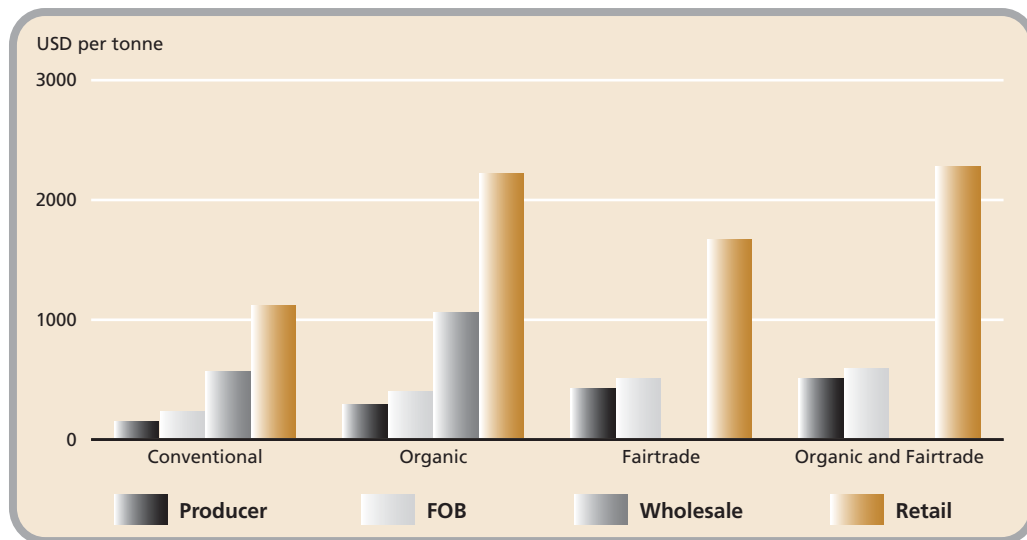
therefore did not receive licenses and had to purchase them from well established market operators ('traditional operators'). This could explain why the difference is much higher for organic and fair-trade than for conventional. Another possible explanation is the higher efficiency of the multinational fruit trading companies that can achieve scale economies.

Conversely, the price difference between wholesale and retail levels is highest for conventional (150 percent). For organic and fair-trade it is moderate (38 percent and 18 percent respectively). This may be explained by the willingness of retailers to limit the price difference between certified and conventional bananas in order to promote the sales of the former. Since conventional bananas were costly due to quantitative restrictions on imports, too large a price premium would have made certified banana unaffordable for most European consumers. Therefore, it is reasonable to assume that retailers limited their margin to promote this product category in which they saw a high growth potential. It can also be interpreted as a sign of a relatively strong bargaining power of European importers of certified bananas vis-à-vis retailers.

It is interesting to note that fair-trade bananas have the smallest differences at all stages (except between FOB and wholesale). Consequently, they have the highest share of the retail price that goes to growers (17 percent). Comparable findings were reported by Roquigny *et al.* (2008) in a recent case study of the Dominican Republic. This is consistent with the declared aim of fair-trade organizations to increase the returns to producer. For organics, the share is 10 percent and for conventional it is only 8 percent. The organic price premium at retail level is USD 19.5 per box of 18.14 kg but at farmgate level it was only USD 2.5 per box (15 percent).

A similar analysis was performed for the supply chain from Latin America to the United States (Figure 37 and Table 19).

A comparison of figures 35 and 34 shows that prices are higher in Europe than in the United States at all levels (wholesale and retail) and for all types of bananas (conventional, organic and fair-trade). Unlike the situation in Europe, the exporter-to-wholesale price differences are comparable for organic and conventional bananas exported to the United States and relatively moderate. The exporter-to-wholesale price difference is much higher in Europe than in the United States. The wholesale-to-retail difference is also higher in Europe for conventional bananas. However, it is smaller for organic bananas (38 percent to 111 percent). This is consistent with another finding of Kilian *et al.* (2005), namely that the price premium for organic banana expressed in percentage at retail level is higher in the United States than in Europe. They found that the lowest organic price was some 50 percent above conventional prices, with average prices more than 100 percent over the conventional product. In the case of double certification organic and fair-trade, price premiums of 100 percent were common. The authors explained the difference by the fact that the US banana market was a much more open market than the EU market during the period of study.

**Figure 37 - Prices for certified and conventional bananas along the supply chain to the United States in 2004**

Source: elaborated by the author from Kilian et al. (2005)/CIMS

**Table 19 - Percentage price differences along the supply chain Latin America to the United States**

| Banana type    | Diff. Grower to FOB % | Diff. FOB to wholesale % | Diff. wholesale to retail % | Producer/Retail % |
|----------------|-----------------------|--------------------------|-----------------------------|-------------------|
| Conventional   | 60                    | 150                      | 100                         | 13                |
| Organic        | 40                    | 171                      | 111                         | 13                |
| Fair-trade     | 20                    | n.a.                     | n.a.                        | 25                |
| Organic and FT | 17                    |                          |                             | 22                |

Source: elaborated by the author from Kilian et al. (2005)/CIMS

There was no quantitative restriction to banana importation, no import license system and no duty on imports. Therefore, importers and wholesalers could not extract a large rent on certified bananas. However, US retailers did extract a rent on certified bananas. The authors found that the price level for Fairtrade bananas, and especially organic ones, had a substantially higher range than for conventional bananas. In contrast, in Europe both Fairtrade and organic bananas could be found at prices comparable to conventional ones, depending on the kind of retailer. Although observed prices were often significantly higher than the conventional price, the premium seldom exceeded 100 percent. In Europe, the average organic price premium at retail level was 65 percent.

These differences between the United States and Europe may be explained by differences in the development stage of the market for certified products. In Europe, the fair-trade and organic markets started to grow in the early 1990s and market growth had slowed by 2004, whereas organic products in the United States were experiencing rapid expansion. Retailers took advantage of the expanding demand to increase their margin. However, at wholesale level the organic premium was 200 percent (217 percent for Fairtrade) while in the United States it was only 90 percent.

Fair-trade bananas had the smallest differences at all stages. Consequently, they had the highest share of the retail price that goes to growers (25 percent). The share was

identical (13 percent) for organic and conventional bananas. Although in the considered study growers were paid the same price regardless of the destination of the fruit, the share of the final price that went to growers was higher in the United States than in the European Union for all types of bananas (certified and conventional). It can be inferred that in the former EU import system the operators who received import licenses (mainly importers) had much larger margins than growers and exporters.

In conclusion, in both markets fair-trade bananas ensured both the highest price and export/retail price ratio (in percentage) to growers. The price premium was 200 percent at grower level. There was a premium for fair-trade bananas that were also certified organic (260 percent). Organic bananas fetched a higher price than conventional bananas. The premium was 100 percent at grower level.

The above study sheds light on the distribution of value along the banana supply chain in 2004. However, while minimum prices are guaranteed to growers in the FLO system, the profitability of organic production primarily depends on market conditions and these have changed since 2004. For example, the EU banana import system was deeply reformed in 2006. Consequently, it is necessary to carry out the analysis on a more recent period and to consider import prices between the exporter and wholesaler levels. Also, since prices vary markedly across exporting countries, it is necessary to perform country-specific analyses. The following section attempts to address these issues for two countries that export organic bananas.

## 2.2 Case studies of countries exporting organic bananas

In order to gain a better understanding of the distribution of value along the supply chain it is necessary to analyse specific country cases. This section examines successively two exporting countries and analyses how prices evolve from exporter to retailer level for two supply chains: conventional and organic bananas. Organic banana exports are of primary importance to the Dominican Republic and Peru. They account for nearly half of the total banana export value for the former, while the latter exclusively exports organic bananas. For the other suppliers, conventional banana exports are much more important. For this reason, this section will focus on these two countries.

### A. The Dominican Republic

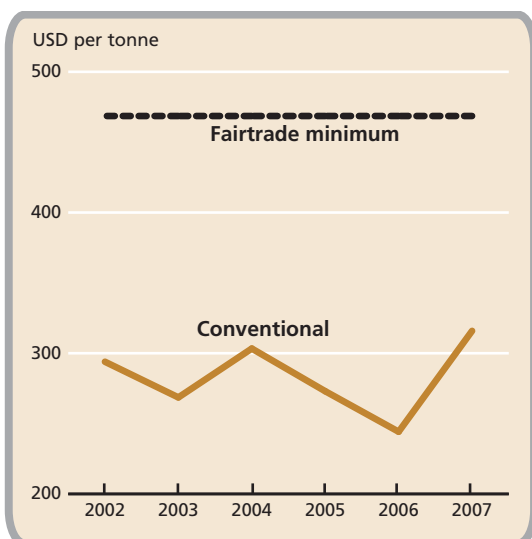
#### *Analysis at exporter level*

Bananas are an important export crop for the Dominican Republic. They already accounted for 6 percent of total agricultural export earnings and 3 percent of total merchandise exports in 2005. Their share has probably increased further since then, as the export value grew to over USD 70 million in 2007 (Table 20). Organics accounted for between 38 percent and 55 percent of the banana export value depending on the year over the period 2004-2007. The variations are due to a large extent to the incidence of weather, in particular hurricanes.

As it was not possible to obtain FOB price data for the years 2004 to 2007, the average unit value of banana exports will be used as a proxy. Figure 38 below shows that the FLO minimum price was consistently higher than the estimated FOB price in the Dominican Republic over the period 2002-2006, with a difference of more than USD 150 per metric tonne.

As shown in Table 16 in Section 1.2, prices for conventional bananas have risen steadily since 2004, whereas organic prices have fluctuated. As a result, the premium has contracted. In 2007, the organic price was high, but the conventional price reached an all-time high, which led to a rather small premium (less than 25 percent as opposed to nearly 77 percent two years earlier).

**Figure 38 - Unit value of exports of conventional bananas and minimum Fairtrade FOB price for the Dominican Republic**



Sources: FAOSTAT, Comtrade, FLO and CEI-RD

The Dominican Republic focuses its organic exports on a handful of markets. Europe accounted for 96 percent of the value exported between 2004 and 2007, with the top four markets representing 94 percent. It is interesting to examine which markets are the most profitable for organic banana exports. Figure 39 displays the average unit values of exports by main countries of destination. As seen in Chapter II, the United Kingdom is the primary market for Dominican bananas, accounting for nearly three-quarters of the export value in the period 2004-2007. The reason appears clearly from the figure. Only Sweden had, at times, prices that were similar to those for the United Kingdom, but demand is much lower due to the small population.

When examining the variations in the organic price premium across European destinations, one can observe some convergence over time (Figure 40). The premium has tended to fall in the markets where it was above the

**Table 20 - Value of banana exports from the Dominican Republic (USD)**

|      | Organic    | Conventional | Total      | Organic % |
|------|------------|--------------|------------|-----------|
| 2004 | 11 871 035 | 9 627 531    | 21 498 566 | 55        |
| 2005 | 23 040 880 | 21 977 896   | 45 018 776 | 51        |
| 2006 | 25 573 228 | 28 694 230   | 54 267 458 | 47        |
| 2007 | 26 330 708 | 43 803 319   | 70 134 027 | 38        |

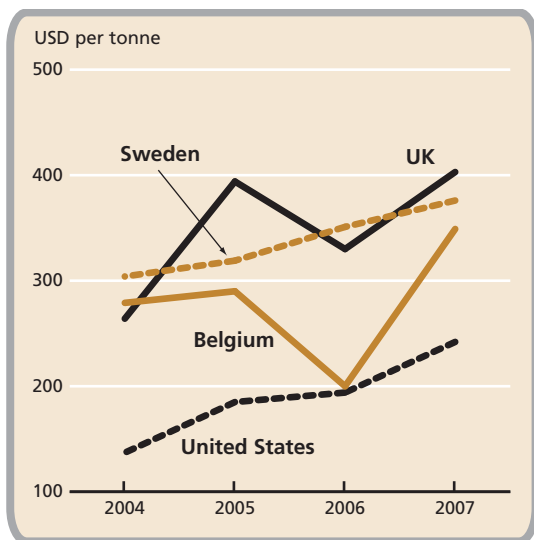
Source: CEI-RD (2008)

European average (e.g. the United Kingdom, Belgium) while it has risen in the other markets (Germany, the Netherlands). As a result, the premium was in a much narrower band across European destinations in 2007 than it was a few years earlier (20 to 60 percent as opposed to 10 to 100 percent in 2005). This development may reflect the ongoing integration of the European market for organic bananas.

**Analysis at importer level**

In order to examine import prices over a longer time period and compare them with the available export prices, the unit values of banana imports from the Dominican Republic were computed as a proxy for prices since these were unavailable. Since none of the organizations that collect official import statistics distinguishes between certified and conventional bananas, an estimate was calculated in the following way. The shares of organic bananas in total banana exports from the Dominican Republic were calculated both in value and volume. The total value and volume imported from the Dominican Republic into the European Union as reported by Eurostat were respectively multiplied by these coefficients and then

**Figure 39 - Unit value of organic banana exports to main markets**



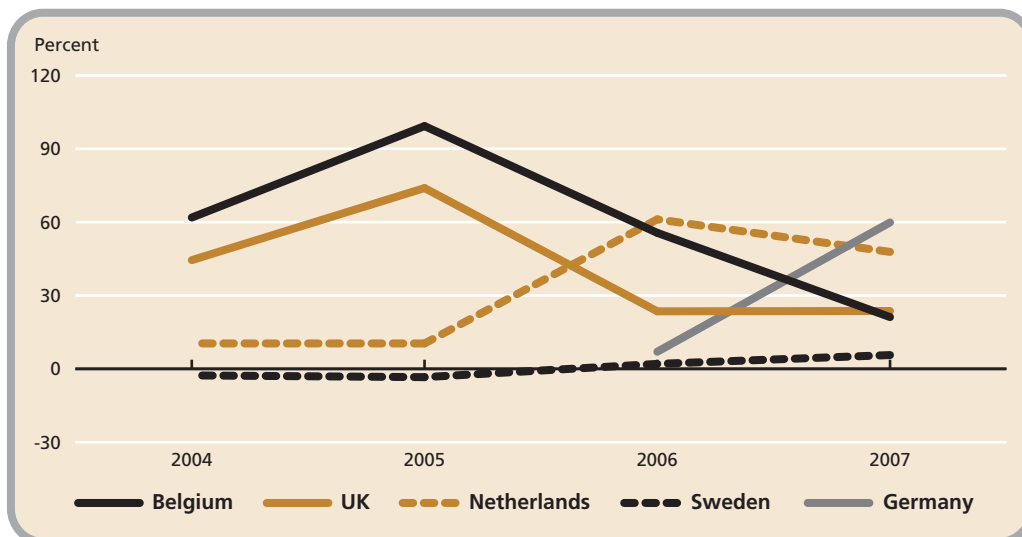
Source: CEI-RD (2008)

divided by each other. Although this method is not perfect, it is the only means of obtaining a proxy for the import price in the absence of reliable data. The results are displayed in Figure 41. High import prices are observed again. They exhibit wider fluctuations than export prices. The price premium for organic bananas at import level varies broadly over time, rising as high as USD 620 per metric tonne in 2005. However, it has contracted in recent years due to the decrease in the organic price and the moderate rise of the conventional price. The organic price appears more stable: it fluctuates in a narrower band than the conventional price, both at import and export levels. It is interesting to note that the prices at export and import levels move in the same direction, except for the year

2005, which was a very atypical year in the EU banana market due to the recent admission of ten new member states.

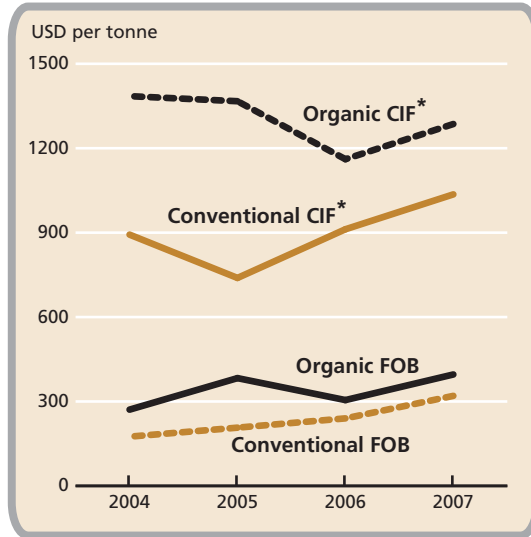
In order to obtain a better estimate of the price premium at import level, import prices for Dominican bananas could be found for the period August 2007-March 2008. They are displayed in Figure 42. The prices of conventional bananas from the Dominican Republic were not available for this period but the average price of bananas imported the EU-15 from all origins is displayed in the chart. The figure shows that the price premium virtually disappeared in March 2008 when conventional banana prices reached a record level. There was a premium for double certified organic and fair-trade bananas of some USD 200 per tonne over the price of organic only. The premium decreased in March 2008 as the price of conventional bananas rose.

**Figure 40 - Organic banana price premium at FOB level by country of destination**



Source: CEI-RD (2008)

**Figure 41 - Unit values of bananas exported from the Dominican Republic to the European Union**



Sources: Eurostat (2008) for imports and CEI-RD (2008) for exports  
(\*): constructed import prices

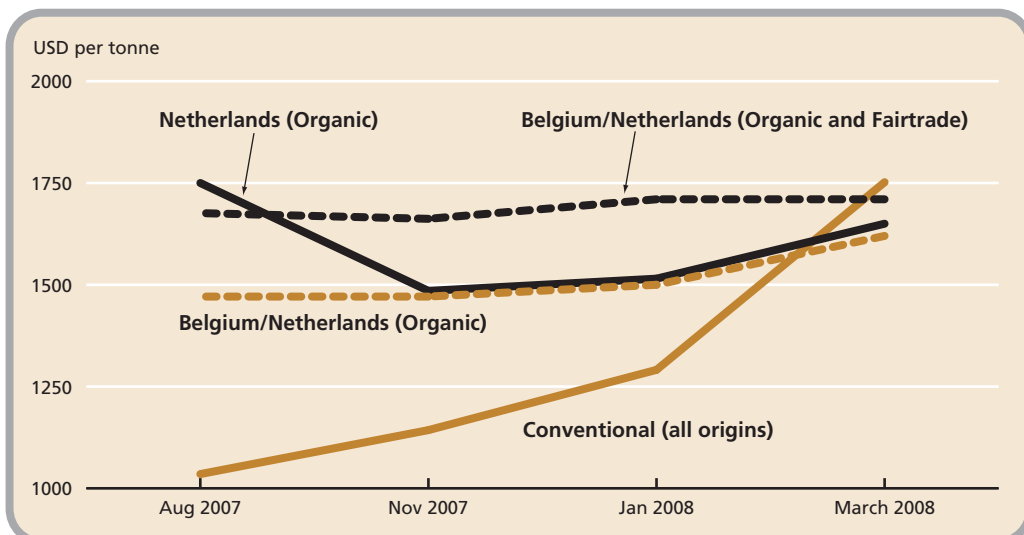
### Analysis at wholesale and retail levels

Once more, the lack of data is a major hurdle when trying to analyse the behaviour of organic banana prices at wholesale and retail levels. France is the only substantial European market where official prices for organic bananas at both wholesale and retail levels could be found for a significant period of time. These data are regularly collected and published by the French Service des Nouvelles des Marchés (Market News Service). Although it is a smaller market than the United Kingdom and Germany, France consumes substantial quantities of organic bananas. Also, there is evidence that the market of the countries that are members of the euro zone is highly integrated. Hence, the French market can be assumed to be representative of other euro zone's markets. These prices are displayed

in Figure 43 for the period 2006 to early-2008. They relate to a mix of origin countries designated as "America" which includes the Dominican Republic, Peru and Colombia.

As can be observed, prices were relatively stable during the period considered. The retail price was almost always above €2.5 per kg while the wholesale price fluctuated around €1.5 per kg. The average difference retail/wholesale was important: approximately €1 per kg or 155 percent over the period. This percentage difference is more than double the retail/wholesale difference for conventional bananas, which was on average 64 percent (€0.76 per kg) as shown in Figure 44.

**Figure 42 - Import prices of Dominican organic bananas in Europe (EXW)**



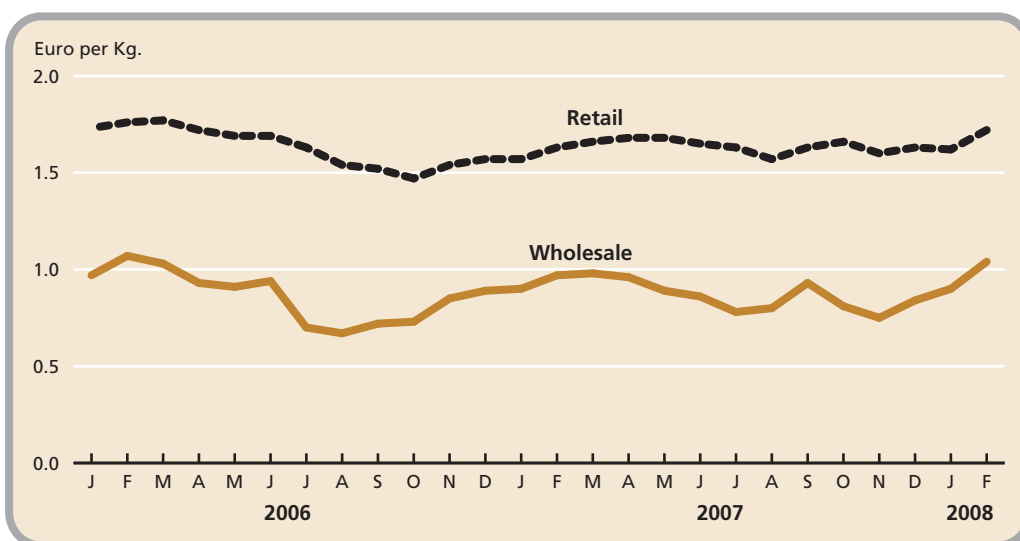
Source: ITC Market News Service (2008) and Corbana (2008) for conventional prices

**Figure 43 - Monthly wholesale and retail prices for organic bananas in France (origin: Americas)**



Source: Service des Nouvelles des Marchés (2008)

**Figure 44 - Monthly wholesale and retail prices for conventional bananas in France (origin: Americas)**



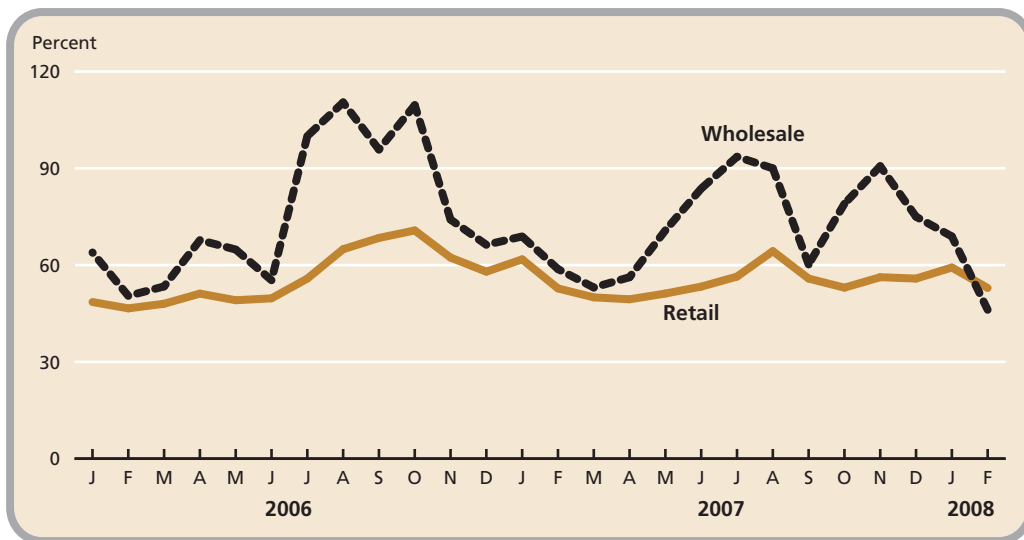
Source: Service des Nouvelles des Marchés (2008)

The organic price premium expressed in percentage was analysed. The results (shown in Figure 45) show that the premium is more stable at retail than at wholesale level but it is larger at wholesale level. At retail level, it fluctuates in a 46 percent to 71 percent range. At wholesale level, its fluctuation range is 46 to 110 percent. Table 21 below shows that the annual average premium rose in 2007 from its level of 2006.

#### **Price distribution along the supply chain**

A large share of the bananas found on the French market is imported through Belgium and the Netherlands. Therefore, the import price needs to be considered in these countries. Since the euro zone functions to a large extent as a unified market, this assumption is justified. The unit value of exports to these two countries was calculated for both

**Figure 45 - Difference (%) between organic and conventional prices at wholesale and retail levels**



Source: Service des Nouvelles des Marchés (2008)

**Table 21 - Organic price premium for bananas at wholesale and retail levels in France (in percentage)**

|                 | Org./Conv. %<br>Average<br>Difference<br>(Retail) | Org./Conv. %<br>Average<br>Difference<br>(Wholesale) |
|-----------------|---|--|
| 2006 (average)  | 56.08   | 75.99  |
| 2007 (average)  | 64.35   | 82.91  |
| 2008 (2 months) | 56.07   | 57.51  |

Source: Service des Nouvelles des Marchés (2008)

organic and conventional bananas. The real import price for organic bananas in these countries as collected by the ITC for the period August-November 2007 was used. A better estimate of the unit value of imports of conventional bananas from the Dominican Republic was computed using this price and the total import figures of Eurostat. The result found was tested by comparing it with the average FOR (free on rail) price for bananas imported into the EU-15 from all origins during the same period as published in the Notifax bulletins. The former was 18 percent below the latter, which is reasonable given the fact that FOR prices are above CIF prices and that the Dominican Republic is known to be a competitive supplier.

The results are presented in Table 22. As can be observed, the price difference along the supply chain is the highest between the export and import levels. This is consistent with the findings presented above and reflects transportation and handling costs. Conversely, the difference appears small between the import and wholesale levels, especially for conventional fruit. This is surprising, as the difference is supposed to cover ripening and transportation costs overland from the harbour (Rotterdam or Antwerp) to France. The retail difference is high, but more for conventional bananas than for the organic ones. Again, this may be explained by an attempt by retailers at limiting the level of organic prices (much higher than conventional ones) to encourage organic banana sales. The organic price premium rises along the supply chain (it doubles between the FOB and CIF levels) up to the wholesale level (where it is over three times its FOB value) but contracts slightly at the retail level<sup>20</sup> (Figure 46). Nevertheless, it remains high in absolute value: in France in

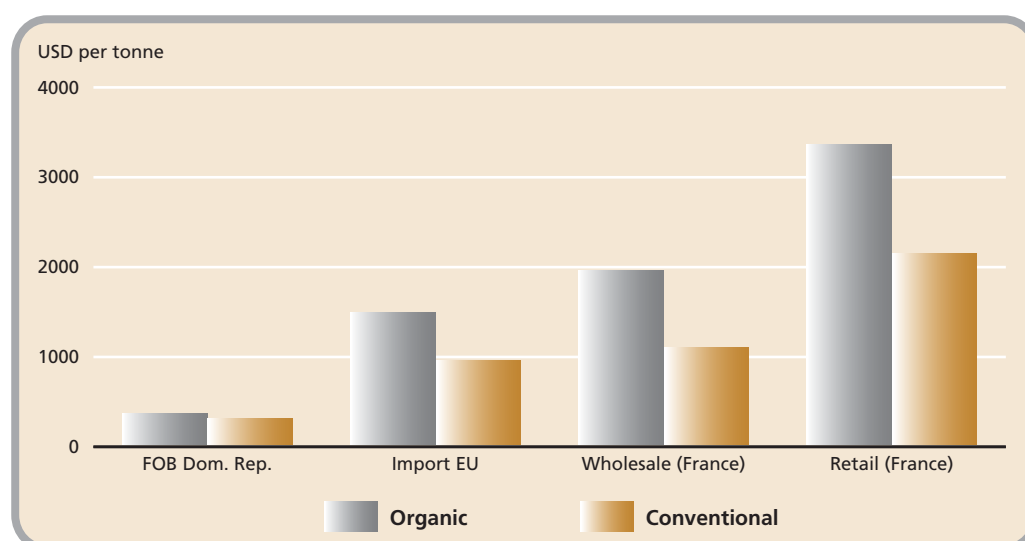
<sup>20</sup> His finding is consistent with the results of Kilian et al. (2005) for Latin American bananas exported to



**Table 22 - Estimated prices and differences of Dominican bananas along the supply chain to France in 2007**

| 2007<br>USD/MT       | Est. FOB<br>DR | Import<br>price<br>EU | Diff. % | Wholesale<br>(France) | Diff. % | Retail<br>(France) | Diff. % | Export<br>price<br>(%) |
|----------------------|----------------|-----------------------|---------|-----------------------|---------|--------------------|---------|------------------------|
| Organic              | 350            | 1 471                 | 320     | 1 938                 | 32      | 3 342              | 72      | 11                     |
| Conventional         | 288            | 941                   | 227     | 1 082                 | 15      | 2 125              | 96      | 13                     |
| Organic<br>premium % | 22             | 56                    |         | 79                    |         | 57                 |         |                        |

Sources: CEI-RD, ITC MNS, French MNS (2008)

**Figure 46 - Estimated prices of Dominican bananas along the supply chain to France in 2007**

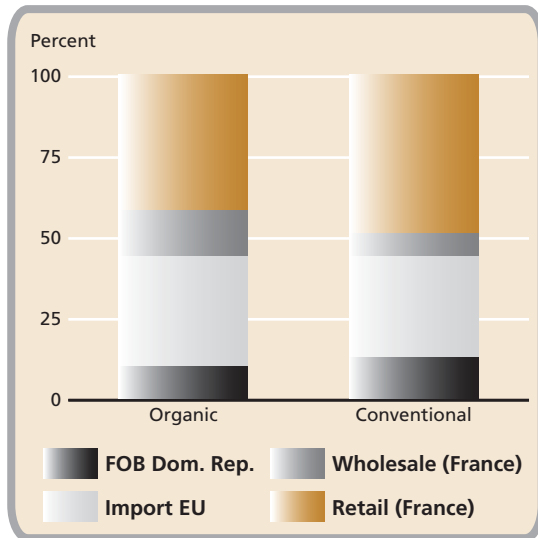
Sources: CEI-RD, ITC MNS, French MNS (2008)

2007 on average organic bananas cost almost one euro more per kg than conventional ones. The exporter obtained only a fraction of this premium (less than €0.05 per kg). As Figure 47 shows, retailers obtain the highest share of the retail price (over 40 percent). CIRAD (2008) found a similar percentage. Yet, the value chain for organic bananas is less dominated by retailers than that of conventional bananas. However, this situation does not benefit the exporting countries, as the value is captured by importers/wholesalers. The share of the retail price that goes to the exporter is larger for conventional than for organic bananas (13 percent against 10 percent). In view of the higher costs of organic banana production, this finding raises questions on the returns to investments in organic banana production in the Dominican Republic.

The analysis was repeated using the unit value of imports constructed from Eurostat data for the years 2007 (instead of collected import prices) and 2006. Very similar results were found: the price difference is greatest at the exporter to importer level and the wholesale price difference is relatively small for conventional bananas.

The same analysis was repeated with Germany, for which retail prices are available for the whole year 2007. Wholesale prices could be found for the second half of 2007 only. The results are presented in Table 23 and figure 48.

**Figure 47 - Price distribution along the banana supply chain Dominican Republic to France in 2007 (as percentage of retail price)**



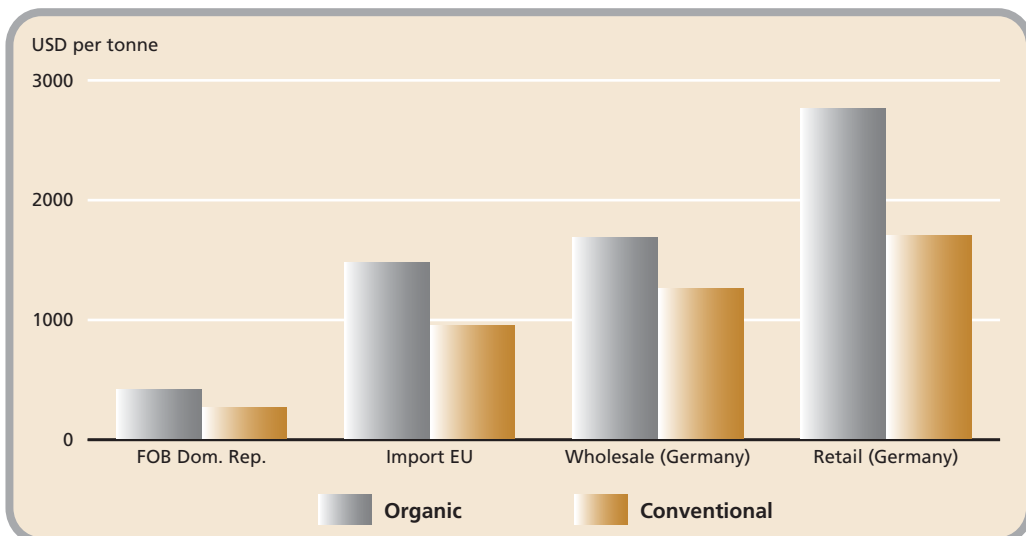
Sources: CEI-RD, ITC MNS, French MNS (2008)

Analysing the evolution of price along the supply chain, it can be observed that the largest price difference is between the FOB and importer stages, but the difference is comparable for organic and conventional bananas. As in the case of France, the lowest price difference is between the import and wholesale stages. The difference between the wholesale and retail prices is similar to France for organics: in both countries, retailers capture some 40 percent of the retail price. However, for conventional bananas it is much lower in Germany. Indeed, the retail stage accounts for less than 30 percent of the conventional retail price in Germany (Figure 49) as opposed to almost 50 percent in France. This difference might be explained by the fact that competition in the conventional banana market is more

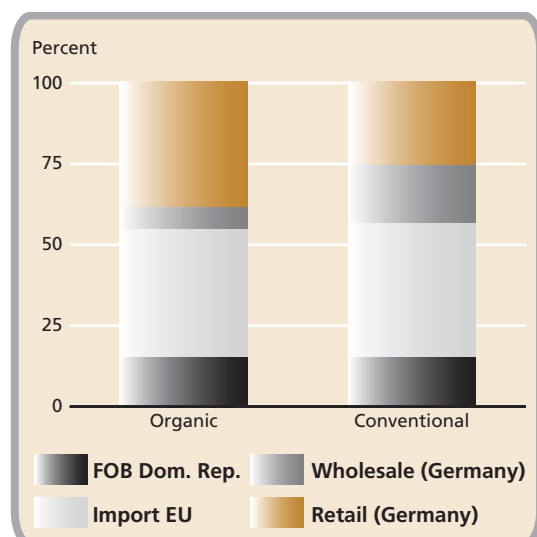
intense in Germany partly due to the presence of discount store chains. The organic price premium is relatively stable along the supply chain. It is lower than in France at wholesale level but similar at retail level.

In Germany retail prices are lower than in France for both organic and conventional bananas (Figure 48). Combined with the higher FOB prices for bananas exported to Germany, this results in higher export/retail price ratios to exporters. The percentage of the retail price that goes to the exporter is 15 percent for organic bananas exported to Germany while it is 10 percent to France. This advantage is reflected in the larger quantities exported to Germany. The price premium is slightly above USD 1/kg at retail level and USD 0.15/kg at exporter level (14.5%).

**Figure 48 – Estimated prices of Dominican bananas along the supply chain to Germany in 2007**



**Figure 49 – Price distribution for Dominican bananas along the supply chain to Germany in 2007 (as percentage of retail price)**



**Table 23 - Estimated prices and differences of Dominican bananas along the supply chain to Germany**

| 2007 USD/MT       | FOB DR | Import EU | Diff. % | Wholesale (Germany) | Diff. % | Retail (Germany) | Diff. % | Export as % of retail |
|-------------------|--------|-----------|---------|---------------------|---------|------------------|---------|-----------------------|
| Organic           | 412    | 1 471     | 257     | 1 675               | 14      | 2 750            | 64      | 15                    |
| Conventional      | 258    | 941       | 265     | 1 251               | 33      | 1 691            | 35      | 15                    |
| Organic premium % | 60     | 56        |         | 34                  |         | 63               |         |                       |

Sources: CEI-RD, ITC and ZMP (2008)

## B. Peru

Peru's exports of organic banana have risen rapidly since 2000 and exceeded the value of USD 30 million in 2007, accounting for approximately 2 percent of total agricultural exports. Until 2006, the United States was Peru's main market, but it was taken over by the European Union in 2007. Shipments to the European Union trebled from early 2006 to end 2007 (Figure 50) and the European Union accounted for nearly two-thirds of the export value (Table 24). This surge may be partly explained by the fact that rising quantities of Peruvian bananas are also Fairtrade certified. Another cause is the reform of the EU banana import system. Until December 2005, Peru's exports were constrained by the system of tariff quotas. As Peru is a relatively recent origin for banana supply and not an ACP country, importers of Peruvian bananas did not have easy access to import licenses and had to purchase them from other importers at a high price. This made exporting to the United States, where banana entered duty-free without any quantitative restrictions, more profitable. In January 2006 the European Union's quota system was replaced by a tariff-only system, whereby bananas from non-ACP third countries pay a duty of €176 per tonne but are no longer subject to quantitative restrictions. The higher level of prices in the European Union makes it more profitable to

**Table 24 - Value of Peruvian organic banana exports by destination (in USD) 2004-2007**

|      | USA        | EU         | Asia      | AL     | Total USD  |
|------|------------|------------|-----------|--------|------------|
| 2004 | 4 690 387  | 4 332 588  | 1 453 338 | 75 805 | 10 552 118 |
| 2005 | 9 346 000  | 6 389 616  | 1 823 366 | 29 628 | 17 588 610 |
| 2006 | 12 213 190 | 12 168 185 | 2 084 179 | 76 860 | 26 542 414 |
| 2007 | 8 118 799  | 19 289 789 | 3 795 205 | 37 684 | 31 241 477 |

Source: PromPex (2008)

export there in spite of the tariff. As a result, Peruvian exporters have increasingly shifted their exports towards the European Union away from the United States since 2006. This strategy is better understood when examining the unit value of exports according to the destination (Table 25). The values have been consistently greater in the European Union than in the United States. They have increased steadily, as a rising number of farmer groups obtained Fairtrade certification and were able to obtain a higher price (Soldevilla, 2008). It is interesting to note that the values can be extremely high in Asia (mainly Japan), which may explain why exports to this market have expanded, but they are subject to large fluctuations.

Since Peru exports organic bananas only, the organic price premium cannot be computed directly. However, it is interesting to compare its prices with those of Ecuador<sup>21</sup>. Ecuador and Peru are neighbouring countries located in the same geographical area with similar climates. Their banana sectors present many similarities in terms of agro-ecological, social and economic conditions. Although there are large plantations operating in Ecuador, production mainly originates from locally-owned small and medium-sized farms, as is the case in Peru. The bulk of Ecuador's exports being conventional bananas, the average unit value of its banana exports can be considered a good proxy for the FOB price of conventional bananas. The percentage differences displayed in Table 26 below can give some indications on the 'price premium' for Peruvian organic bananas. The constructed 'premium' averaged USD 180 per tonne over the period 2004-2006. In percentage terms, it ranged between 70 and 94 percent.

Since the United States was the main market for Peruvian bananas until 2006, it is interesting to analyse the value chain. The unit value of exports and imports to the United States were used as proxies for FOB and CIF prices respectively. Prices for organic bananas are available for some wholesale markets (Boston, San Francisco) through the USDA's Agricultural Marketing Service (AMS). However, it was not possible to find useful data on retail prices. The analysis was therefore performed from the export to the wholesale stages. The results are displayed in Table 27 and Figure 51. The constructed organic 'price premiums' (in %) are almost identical at export and import level. The 'premium' is lower at wholesale level. The exporter-to-importer price difference is relatively low. The

**Table 25 - Unit value of Peruvian organic banana exports by destination 2004-2007 (USD/MT)**

|      | USA | EU  | Asia |
|------|-----|-----|------|
| 2004 | 384 | 381 | 818  |
| 2005 | 405 | 412 | 436  |
| 2006 | 463 | 466 | 469  |
| 2007 | 454 | 487 | 895  |

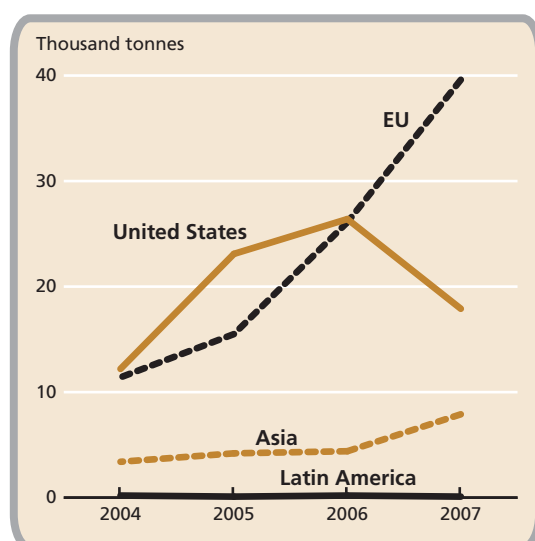
Source: PromPex (2008)

<sup>21</sup> It would have been interesting and logical to compare the prices of organic and conventional bananas from Ecuador but the former were not available.

**Table 26 - Unit value of banana exports from Peru and Ecuador (all destinations, 2004-2007, in USD/MT)**

| Year | Peru Organic | Ecuador Conventional | Difference % |
|------|--------------|----------------------|--------------|
| 2004 | 388          | 229                  | 69           |
| 2005 | 410          | 225                  | 82           |
| 2006 | 465          | 265                  | 75           |
| 2007 | 477          | 246                  | 94           |

Sources: PromPex and COMTRADE (2008)

**Figure 50 - Variations in Peru's organic banana exports by destination, 2004-2007**

Source: PromPex (2008)

export and import prices is considerable (over 130 percent), especially in the case of conventional bananas from Ecuador. Generally speaking, import prices are much higher than in the United States. In their study Kilian *et al.* explained the difference by the import quota system that was then in force in the European Union. However, the above figures relate to 2006, the first year of the tariff-only system, when quantitative restrictions no longer existed. Part of the difference may be explained by the tariff of €176 per tonne

**Table 27 - Estimated prices along the banana supply chain: Peru and Ecuador to the United States (2006)**

| USD/MT                        | Export price | Import price (USA) | Difference % | Wholesale price (USA) | Difference % |
|-------------------------------|--------------|--------------------|--------------|-----------------------|--------------|
| Organic (Peru)                | 463          | 580                | 25           | 1 131                 | 95           |
| Conventional (Ecuador)        | 279          | 346                | 24           | 825                   | 138          |
| Estimated 'organic premium' % | 66           | 68                 |              | 37                    |              |

Sources: PromPex, COMTRADE and USDA-AMS (2008)

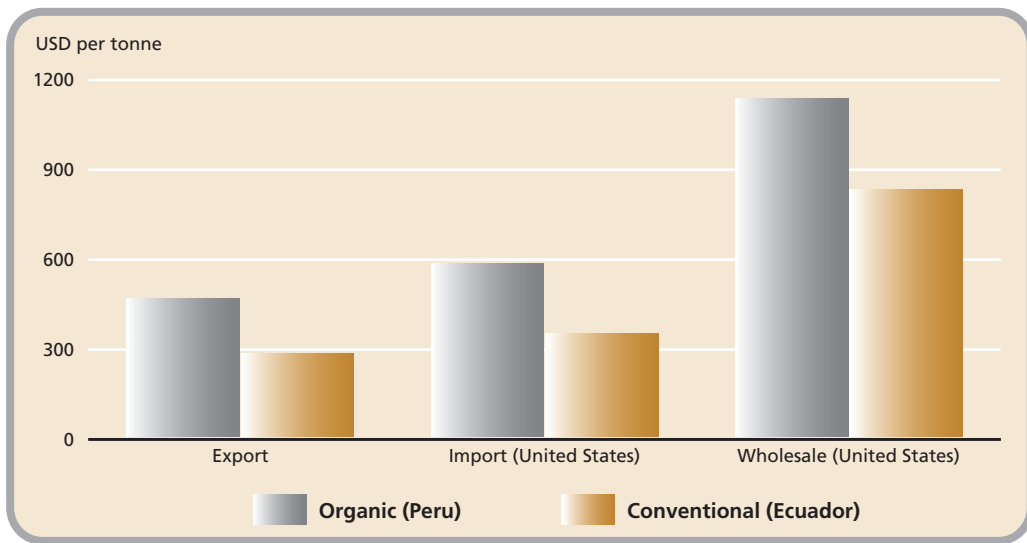
importer-to-wholesaler difference is higher for conventional Ecuadorian bananas. As can be seen in Figure 52, Peruvian exporters obtain a higher share of the wholesale price than Ecuadorian exporters. The same analysis was done for the year 2007 and similar results were found.

### Comparison United States-European Union

Since Peru has become a substantial supplier of the European Union, it is useful to compare the value chains to the United States and the European Union. In 2006, Peru's banana exports were almost equally split in value between these two markets, and together they accounted for 92 percent of the total export value. Table 28 below shows the result of the analysis, using the unit values of exports and imports as a proxy for import prices. The wholesale and retail prices in France are the same as those used in the previous section on the Dominican Republic (they are understood to include a mix of bananas from the Americas including the Dominican Republic and Peru). No price data were available for a single country of origin.

Unlike what was observed with the United States, the difference between

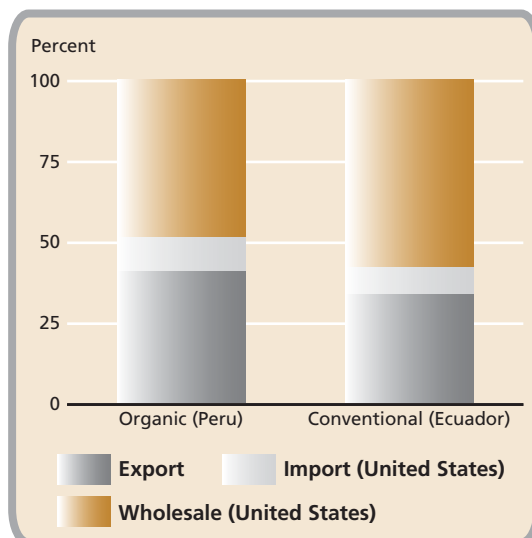
**Figure 51 - Prices along the banana supply chain: Peru and Ecuador to the United States in 2006**



Sources: PromPex, COMTRADE and USDA-AMS (2008)  
 Note: conventional wholesale price for all Latin American origins

(USD 258 at the exchange rate of 2007) and the higher transportation costs due to the longer distance between the European Union and the two Andean countries, but this is not sufficient to cover the difference. Consequently, it can be inferred that there are some rigidities and market power in the European import industry that enables importers to extract a greater margin. On the other hand, the share of the retail price that goes to retailers is higher than that found for the year 2004 by Kilian *et al.* (2005). This may reflect the effects of the liberalization of the EU banana import system in 2006.

**Figure 52 - Distribution of banana prices along the supply chain: Peru and Ecuador to the United States (as percentage of wholesale price)**



Sources: PromPex, COMTRADE and USDA-AMS (2008)  
 Note: conventional wholesale price for all Latin American origins

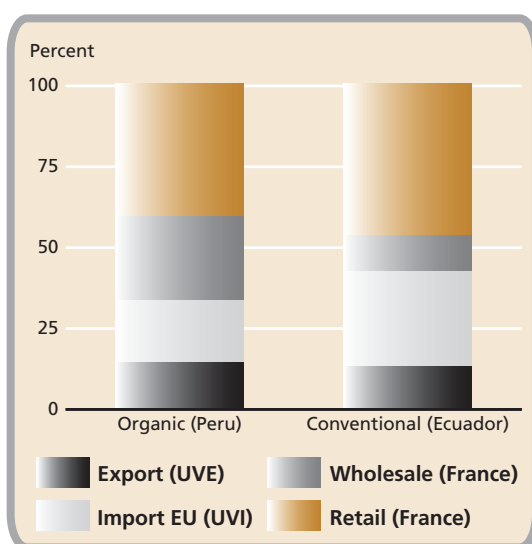
The import-to-wholesale difference is high for organics but relatively low for conventional fruit. The percentage of the retail price that accrues to Peruvian exporters is 14 percent, a higher value than the percentage obtained by Dominican exporters (11 percent), reflecting a higher FOB price for Peru. It is similar to the percentage found for conventional bananas from Ecuador (13 percent). The estimated 'price premium' at retail level is approximately USD 1.2/kg while at it is USD 0.19/kg at FOB level (16%).

The estimated 'organic price premium' (in %) is much lower at import level than at export level, which reflects the very high import margin for conventional bananas. It rises at wholesale level but decreases at retail level.

**Table 28 - Estimated banana prices along the supply chains: Peru and Ecuador to France in 2006**

| 2006                     | Export USD/MT | Import EU USD/MT | Diff. % | Wholesale (France) USD/MT | Diff. % | Retail (France) USD/MT | Diff. % | Export/retail price (%) |
|--------------------------|---------------|------------------|---------|---------------------------|---------|------------------------|---------|-------------------------|
| Organic (Peru)           | 466           | 1 099            | 136     | 1 978                     | 80      | 3 350                  | 69      | 14                      |
| Conventional (Ecuador)   | 274           | 891              | 225     | 1 141                     | 28      | 2 152                  | 89      | 13                      |
| Est. 'organic premium' % | 70            | 23               |         | 73                        |         | 56                     |         |                         |

Sources: PromPex, Comtrade, Eurostat and SNM (2008)

**Figure 53 – Distribution of banana prices along the supply chains from Peru and Ecuador to France (as percentage of retail price)**

Sources: PromPex, Comtrade, Eurostat and SNM (2008)

## C. Discussion

### Exporter and producer prices

The above analyses found that there is a price premium at FOB level for developing countries exporting certified bananas. The size of the premium varies substantially across producing countries, over time and depending on the chosen standard. The Fairtrade guaranteed minimum price was found to vary from 20 to 50 percent above the average unit value of exports depending on the country. The analysis suggests that the organic price premium is higher for Peruvian bananas than for bananas from the Dominican Republic. In the latter, the organic FOB price premium fluctuated between 22 and 77 percent over the period 2004-2007. The variations in price premiums are mainly due to the fluctuations of the price for conventional bananas, as the

price of certified bananas tends to be more stable over time. The comparison of the two standards examined in this report suggests that not only Fairtrade FOB prices are more stable than organic FOB prices due to the existence of the guaranteed minimum price, but in addition they tend to be higher. The stability of prices is an important element for exporters and growers, as it can give them the visibility necessary to make investments.

It would have been useful to determine to what extent higher FOB prices lead to higher prices for growers. Evidence for the year 2004 suggests that growers do obtain substantially higher prices for certified bananas, but the more recent analyses presented above could not go beyond the exporter level due to the lack of data on producer prices. When producer groups export directly, which is the case of most fair-trade groups in Latin America, the FOB price premium can give useful indications about the farmgate price. However, when producers sell to an independent exporter, a case which is not uncommon in the organic banana sector, the price they obtain cannot be inferred from the exporter's price.

### **Price distribution in the value chain**

The distribution pattern of the value generated by certification at consumer level has important implications for the economic development of the exporting countries. In view of the consumer surveys showing that the high price of certified products is a critical constraint to market development, one would hope that a large proportion of the price premium paid by consumers is redistributed to the producers. Yet, the value chain analyses suggest that a relatively small share of the premium accrues to the exporting country. Most of it is captured by downstream operators in the import market. The redistribution of value to the producing country depends on the type of certification system and the export market. There is some evidence that the FLO system, which guarantees a minimum Fairtrade price and a price premium, redistributes more value to growers than organic and conventional bananas. This is consistent with FLO's declared objective of raising the percentage of the consumer price that goes to growers. The example of Peru shows that Fairtrade certification raises the average FOB price of organic bananas.

There is no price guarantee in organic agriculture, but there usually is a price premium resulting from consumer preference for organic foods. This premium is not distributed evenly along the supply chain. While the premiums found generally exceeded one dollar per kg at retail level, they only ranged between 5 and 20 US cents per kg at exporter level (accounting for between 5 and 16 percent of the premium at retail level) depending on the exporting and importing countries examined. In percentage terms, the premium varied along the supply chain and was at its maximum at the wholesaler/distributor level.

Analysing the evolution of prices along the supply chain, it was found that retailers capture the largest share of the retail price. In the cases presented above this share ranged between 40 and 48 percent. This situation highlights the strong bargaining power of large-scale retailers. The control of the conventional banana chain has gradually shifted away from trading companies towards supermarket chains since the 1990s. This change can be explained by two factors. First, the retail sector has undergone unprecedented concentration over the past 20 years. Second, the banana industry has become more fragmented during the same period, as the combined market share of the leading three multinational companies contracted. A similar development may be occurring in the value chains for certified bananas, especially in the United States, where the analysis suggests that retailers capture a large proportion of the value generated by certification. Their estimated margin is slightly higher for organic bananas than for conventional ones. However, this may not necessarily mean that they totally control the organic value chain. The importation and distribution of organic bananas is relatively concentrated in the United States, with one company playing a central role. The ability of retailers to take a large margin on certified bananas may also derive from the fact that prices for all types of banana were low in the United States in the period covered by the study.

The trend towards more retailer power is less evident in the European market for certified bananas, where importers still manage to capture a substantial share of the value added by organic certification. The analyses tend to indicate that they take a high margin on certified bananas. Conversely, the estimated retailer margin is lower for certified than for conventional bananas. This may reflect a relatively high bargaining power of the specialized organic produce importers, and could indicate that they retain some control over the value chain for organic bananas in Europe. Faced with high supplier prices for organic bananas, EU retailers may have limited their margin in order to avoid discouraging clients with excessive retail prices and promote consumption of a product for which they see a high growth potential. Interestingly, data for an earlier period (2004) evidenced a lower percentage of the organic retail price accruing to retailers. The fact that this share had increased in 2007



might reflect the first effects of the liberalization of the EU banana market, which is viewed as favourable to retailers due to the resulting increase and fragmentation of supply.

Regardless of the export market, the comparison of the organic and conventional supply chains suggests that the price difference between two links of the chain is higher in the organic chain. The difference between the two chains may be partly explained by higher costs in the organic chain. The prohibition on the use of chemical fungicides and preservatives may raise fruit losses at all stages of the chain. Also, the volumes are much lower in the certified banana trade, providing less scope for economies of scale. This raises the unit cost of all operators and makes the organic chain less efficient. However, there is a suspicion that higher margins in the organic chain also contribute to the difference. It would have been useful to examine the profit margins of operators at the various stages of the chain. Regrettably this was impossible due to the lack of data on costs. Yet, it is likely that the extra costs entailed by certification vary widely along the chain. In particular, growers bear a large share of the extra costs of organic banana due to the technical challenges of organic cultivation in tropical countries, where diseases such as Black Sigatoka are prevalent and difficult to combat with organic inputs. However, the export/retail price ratio of organic bananas tends to be similar to that of conventional bananas. The analysis suggests that the share of the retail price received by organic exporters ranges between 10 and 15 percent, a range which does not differ much from that of conventional bananas. Thus, despite the existence of an organic price premium at exporter level, it seems that the share of the consumer price premium that trickles down to producing countries is not commensurate with their extra costs. Field studies are needed to obtain more data on the costs of organic cultivation.

In short, the marketing chains for organic and fair-trade bananas are affected by distortions which have two negative effects. First, they prevent developing country producers from reaping the full benefits of implementing sustainable agriculture standards. This reduces the returns to investment in sustainable production and the incentives for growers to adopt such standards. Second, they impede the expansion of the markets for certified bananas by generating high retail prices. Consequently, market failures limit the potential of certification systems to contribute to sustainable development. Policy interventions may partly remedy these failures. Some suggestions are made in the next chapter.

### **Methodological issues**

It is important to note that the analyses were constrained by the lack of reliable data and, therefore, their results should be taken with caution. They can only indicate general trends that should be validated by more detailed studies. The lack of data on farmgate and FOB prices for organic bananas is a major constraint. Even the official data available on export values and quantities that were used to estimate FOB prices are subject to caution. Also, while more data on import, wholesale and retail prices for organic bananas have become available recently in a few developed countries, these data are still limited and do not distinguish between countries of origin, thus making value-chain analysis less accurate. Farmer organizations, trade associations and government agencies in the major supplying countries would benefit from the development of national systems to collect import and retail prices.

Finally, the high degree of vertical integration of the banana industry is another constraint. Integrated companies account for a substantial share of conventional banana exports. Similarly, large volumes of certified bananas are shipped directly by farmer organizations to specialized importers who ripen and distribute them to large-scale retailers. Therefore, a substantial share of the trade takes place within firms, making value chain analysis more difficult.



# CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

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## 1. CERTIFICATION HAS BECOME WIDESPREAD IN THE BANANA INDUSTRY

Within the fresh produce sector the banana export industry is by far the leader in the use of voluntary certification. There are several reasons for its widespread adoption of certification. First, voluntary certification is a means of responding to growing concerns among consumers and NGOs over the industry's environmental and social performance. These concerns played a significant role in the decision of some multinational fruit companies, in particular Chiquita and Dole, to have part or all of their operations certified to social (e.g. SA8000) or/and environmental standards (e.g. Rainforest Alliance, ISO 14001, organic). Second, it is a strategy to differentiate products and add value. Diversifying into higher-value products is a basic strategy to maintain profit in a market that has been characterized by surplus and decreasing returns to investments by producers and traders. Finally, the highly concentrated and vertically-integrated nature of the industry facilitates the adoption of standards.

There is a wide array of voluntary certification schemes used in the banana industry, and they differ significantly in their objectives, scope, advantages and constraints. Among the environmental and social standards, the most common ones in the industry are Rainforest Alliance, ISO 14001, organic agriculture, SA8000 and fair-trade. Some of them use on-product labels that target consumers with a view to harnessing premium market segments. The segmentation of the banana market is a relatively new phenomenon. Until the 1990s bananas were marketed as a uniform mass commodity, whereas today it is relatively common to find at least three types of bananas in Western European supermarkets. A rising number of banana producers use environmental and/or social certification. Aggregate exports of bananas certified to one of the leading three environmental and social standards were estimated at over 2 million metric tonnes in 2007, accounting for close to 15 percent of global banana exports.

## 2. PROSPECTS FOR FURTHER GROWTH IN THE MARKETS FOR ORGANIC AND FAIR-TRADE BANANAS

Among the many voluntary certification systems that are available to the banana industry, fair-trade and organic agriculture stand out for their premium prices, recognition by consumers and market growth. Europe and North America are by far the largest markets for organic bananas, accounting for over 90 percent of global imports. As regards fair-trade bananas, sales are overwhelmingly concentrated in Europe (98 percent of global imports in 2007). The exact value of retail sales is unknown due to the lack of price data, but a global value of US\$800 million in 2006 for both products can be taken as a conservative estimate. In view of the rapid growth of sales and prices in the past two years, it is very likely that this value exceeded US\$1 billion in 2008. Consumption has soared since the late 1990s. Global sales of organic bananas rose ninefold over the ten-year period 1998-2007, while those of fair-trade bananas have been multiplied by 5 in the five years since 2003. While a deceleration is forecast, the drivers of the rapid market expansion observed in the past decade are likely to remain prominent. Four key factors will influence the future growth rate:

- Continued focus by consumers on health and ethical issues in food production
- The conflicting trends towards consumption of locally-produced foods and globalization of the market
- The effects of the commodity price surge on sales and the duration of the economic crisis that started in 2007
- The role of large-scale companies and their rising involvement in the market

The market growth will continue to be mainly driven by changing consumer preferences. In developed countries, consumers are increasingly attentive to the preservation of the environment, social equity, working conditions and labour rights. Also, the growing focus on the health value of foods will favour the consumption of organic bananas. However, certified bananas will need to respond to consumers' multiple and sometimes conflicting demands that encompass all the dimensions of sustainable development. Consequently, the market segment of double-certified organic and fair-trade bananas is forecast to enjoy the strongest expansion provided output can keep up with the rise in demand. Prospects are for further consumption growth in the European Union, where the recent liberalization of the banana market makes it now easier for smaller-scale exporters and importers to sell fruit. The market has become more open and competitive, and this should favour innovative products such as certified bananas. In the United States, sales of organic bananas are expected to accelerate once the economic crisis is over. The future of fair-trade bananas is more difficult to predict. Developing this market in North America will require powerful awareness-raising and advertisement campaigns and the serious involvement of at least one large supermarket chain.

Beside higher per capita consumption in well-established markets, global sales growth is also forecast to be fuelled by a spread to new areas (Asia, Eastern Europe and Latin America). Consumption of organic foods has expanded markedly in Asia in the wake of economic development and rising purchasing power. The Asian market has considerable potential for further growth. Japan offers good export opportunities but the pace of growth will be influenced by the application of phytosanitary measures (in particular fumigation) at the ports of entry. Consumption of organic bananas is expected to rise rapidly in other East Asian countries such as China, Republic of Korea and Malaysia. However, the development of domestic production in China needs to be taken into account. Consumption of certified bananas is forecast to rise steadily also in Eastern Europe owing to the integration of the regional economy and the rising level of incomes.

In theory, the debate on food miles and the rising preference for locally-produced foods might possibly have a negative influence on banana consumption, since the bulk of bananas consumed in developed countries are imported. However, the extent to which consumers are sensitive to this argument is unknown. Even if it had an impact on conventional banana sales, marketers of organic and fair-trade bananas could claim that these products should be considered differently due to their environmental friendliness and social development advantages. In any case, the concept of "food miles" is too narrow to be used for assessing environmental performance. Rather, a full life cycle analysis, from the production to the disposal of the product should be used. Studies have shown that when the whole life cycle of products is considered, there are cases where imported products have a lower overall emission of greenhouse gases than domestic ones.

The surge in agricultural commodity prices that started in 2007 has caused widespread concerns throughout the world. Banana prices have been no exception to this general rising trend. Assuming that prices will remain high, it is difficult to assess the impacts that this development will have on demand for certified bananas, as factors play in opposite directions. A major force that drove the rise was the surge in the oil price. This factor

may favour organic bananas, as organic production generally uses less fossil fuels than conventional agriculture, where they are necessary for the production of chemical fertilizers and synthetic pesticides. Being more labour intensive, organic farming is less affected by the rise in energy prices. Therefore, production costs are expected to rise less than in conventional agricultural production. *Ceteris paribus*, the gap between the prices of organic and conventional bananas may be expected to shrink to the advantage of the former.

However, some factors in the current crisis play against certified bananas. First, even if the price of organic bananas rises comparatively less, this rise may still take the price to a level in absolute terms that few consumers will accept to pay. This effect might be compounded by the loss of purchasing power if the current economic crisis affecting the major markets endures. Press articles from the United States report that some organic farmers have gone back to conventional farming as their product prices were too high for a majority of consumers. In addition, as consumers have to dedicate a larger share of their budget to food, they may try to mitigate this increase by spending less on foods viewed as 'luxuries', including organics. Finally, as conventional farmers obtain better prices, they have less incentives to convert to organic farming (the transition may be lengthy and costly), which might slow the expansion of organic banana areas and the decrease in organic prices.

In the case of fair-trade bananas, if the current rise in conventional banana prices continues and exceeds the Fairtrade minimum price, Fairtrade growers will be paid the market price. The only difference with conventional growers as far as price is concerned will be the payment of the Fairtrade premium. Thus, Fairtrade certification is expected to become less attractive for banana growers from a purely financial perspective. Fairtrade entails other benefits such as market stability, pre-financing and capacity building, as explained in Chapter IV, but growers are not always aware of these. In any case, prices for conventional bananas are forecast to decrease in the medium term due to the current investments in new plantations and the expected slowing of demand growth.

The intensification of the economic crisis in the last quarter of 2008 curbed commodity prices to some extent and is an important demand factor. It has slowed the growth of organic sale in 2008 and will continue to have a marked impact in 2009 and possibly 2010. Yet, experts disagree on the harm it could cause to sales of certified foods, and few of them forecast an outright fall.

On the supply side, the large area of land currently in transition to organic cultivation and investments in organic production by various banana companies will raise the quantity of organic bananas available on the market. In their early years, the organic and fair-trade banana sectors were composed of small and medium farms and enterprises. As the market has grown exponentially, concentration and consolidation have occurred, leading to a higher average firm size today. In addition, some large conventional banana companies, including leading fruit multinationals, have entered the organic banana industry. For example, both Chiquita and Dole market organic bananas purchased from independent growers or cultivated in their own farms, and Dole has become the leading organic banana importer and distributor in the United States. While organics account for only a fraction of the bananas sold by the large companies, their financial and marketing powers create a challenge for smaller-scale producers. If large companies gained control over the importation and distribution of organic bananas in Europe, they would capture a large share of the price premium generated by the organic label. However, they may also be viewed as potential partners in an alliance, especially when they do not have sufficient supply. As for fair-trade certified growers, the large companies are not direct competitors since FLO focuses on small growers. It is unlikely that plantations owned by a multinational banana company will obtain Fairtrade certification.

Combined with the rising involvement of large fruit marketing firms, the expected growth in supply will lead to scale economies, rationalization and increased efficiency of the marketing channels. This should result in lower retail prices, which in turn will raise consumption. The expected market growth is likely to benefit primarily the established suppliers, in particular Ecuador and Peru. Colombia will also raise its exports if companies further invest in organic production and the political situation continues to improve. Elsewhere in South America, Bolivia has started cultivating banana organically and has the potential for becoming an exporter. Similarly, Brazil could become a substantial supplier of organic bananas thanks to its solid experience in organic cultivation and the availability of land, labour, capital and strong fruit companies. Although the Dominican Republic is expected to remain a substantial supplier, its capacity for expanding exports is constrained by climatic factors, in particular hurricanes. Sub-Saharan Africa may harness the liberalization of the EU banana market and the trade preferences granted by the European Union to raise its exports. Ghana, presently the only substantial exporter of organic bananas in the region, stands to benefit from higher European consumption. Finally, market expansion in Asia should primarily benefit exporters from the Philippines, Ecuador and Peru, although Asian newcomers such as China, Thailand and India are forecast to gain strength in the medium term.

### 3. BENEFITS OF ORGANIC AND FAIR-TRADE BANANAS TO DEVELOPING COUNTRIES

#### **Do exporters obtain higher prices for their certified bananas?**

The analyses presented in Chapter IV suggest that there is a price premium at exporter level for developing countries shipping certified bananas. The size of the premium varies substantially across producing countries, over time and depending on the chosen standard. The Fairtrade guaranteed minimum price was found to vary from 20 to 50 percent above the average unit value of exports depending on the country. The analysis suggests that the organic price premium (FOB) is higher for Peruvian bananas than for bananas from the Dominican Republic. The variations in the price premium over time are mainly due to the fluctuations of the price for conventional bananas, as the price of certified bananas tends to be more stable. The comparison of the two standards examined in this report suggests that not only Fairtrade FOB prices are more stable than organic and conventional FOB prices due to the existence of the guaranteed minimum price, but in addition they tend to be higher. The stability of prices is an important element for exporters and growers, as it can give them the visibility necessary to make investments.

#### **Do exporting countries reap the full benefits of certification?**

The distribution pattern of the value generated by certification at consumer level has important implications for the economic development of the exporting countries. In view of the consumer surveys showing that the high price of certified products is a critical constraint to market development, one would hope that a large proportion of the price premium paid by consumers is redistributed to the producers. Yet, the value chain analyses suggest that a relatively small share of the premium accrues to the exporting country. Most of it is captured by downstream operators in the import market. The redistribution of value to the producing country depends on the type of certification system and the export market. There is some evidence that the FLO system, which guarantees a minimum Fairtrade price and a price premium, redistributes more value to growers than organic and conventional bananas. This is consistent with FLO's declared objective of raising the share of the consumer price that goes to growers.



There is no price guarantee in organic agriculture, but there usually is a price premium resulting from consumer preference for organic foods. This premium is not distributed evenly along the supply chain. While the premiums found generally exceeded one dollar per kg at retail level, they only ranged between 5 and 20 US cents per kg at exporter level (accounting for between 5 and 16 percent of the premium at retail level) depending on the exporting and importing countries examined. In percentage terms, the premium varied along the supply chain and was at its maximum at the wholesaler/distributor level.

Analysing the evolution of prices along the supply chain, it was found that retailers capture the largest share of the retail price. In the cases presented above this share ranged between 40 and 48 percent. This situation highlights the strong bargaining power of large-scale retailers. The control of the conventional banana chain has gradually shifted away from trading companies towards supermarket chains since the 1990s. This change can be explained by two factors. First, the retail sector has undergone unprecedented concentration over the past 20 years. Second, the banana industry has become more fragmented during the same period, as the combined market share of the leading three multinational companies contracted. A similar development may be occurring in the value chains for certified bananas, especially in the United States, where the analysis suggests that retailers capture a large proportion of the value generated by certification. Their estimated margin is slightly higher for organic bananas than for conventional ones. However, this may not necessarily mean that they totally control the organic value chain. The importation and distribution of organic bananas is relatively concentrated in the United States, with one company playing a central role. The ability of retailers to take a large margin on certified bananas may also derive from the fact that prices for all types of banana were low in the United States in the period covered by the study.

The trend towards more retailer power is less evident in the European market for certified bananas, where importers still manage to capture a substantial share of the value added by organic certification. The analyses tend to indicate that they take a high margin on certified bananas. Conversely, the estimated retailer margin is lower for certified than for conventional bananas. This may reflect a relatively high bargaining power of the specialized organic produce importers, and could indicate that they retain some control over the value chain for organic bananas in Europe. Faced with high supplier prices for organic bananas, EU retailers may have limited their margin in order to avoid discouraging clients with excessive retail prices and promote consumption of a product for which they see a high growth potential. Interestingly, data for an earlier period (2004) evidenced a lower percentage of the organic retail price accruing to retailers. The fact that this share had increased in 2007 might reflect the first effects of the liberalization of the EU banana market, which is viewed as favourable to retailers due to the resulting increase and fragmentation of supply.

The comparison of the organic and conventional supply chains suggests that the price difference between two links of the chain is higher in the organic chain. The difference between the two chains may be partly explained by higher costs in the organic chain. The prohibition on the use of chemical fungicides and preservatives may raise fruit losses at all stages of the chain. Also, the volumes are much lower in the certified banana trade, providing less scope for economies of scale. This raises the unit cost of all operators and makes the organic chain less efficient. However, it is likely that higher net margins in the organic chain also contribute to the difference. The analysis suggests that the share of the retail price received by organic exporters ranges between 10 and 15 percent, a range which does not differ much from that of conventional bananas. Yet, a large part of the extra costs entailed by organic agriculture arises at production level. Thus, despite the existence of an organic price premium at exporter level, it seems that the share of the consumer price premium that trickles down to producing countries is not commensurate with their extra costs.

In short, the marketing chains for organic and fair-trade bananas are affected by distortions which have three negative effects. First, they prevent developing country producers from reaping the full benefits of implementing sustainable agriculture standards. This reduces the returns to investment in sustainable production and the incentives for growers to adopt such standards. Second, if the market does not compensate adequately the extra costs of producing organically, some growers might be tempted to cheat, especially in areas where the monitoring system is viewed as weak. Finally, the distortions impede the expansion of the markets for certified bananas by generating high retail prices. These market failures limit the potential of certification systems to contribute to sustainable development. Policy interventions may be needed to mitigate these adverse effects.

## 4. POLICY IMPLICATIONS AND RECOMMENDATIONS

### **How can developing country producers capture a larger share of the value?**

In order to limit market distortions and reap the full benefits of value-adding standards, grower organizations should strive to establish short marketing chains on which they can have a sufficient degree of oversight and control. Banana growers should organize in sufficiently large enterprises so that they can reach a critical mass of supply and invest in the necessary facilities to perform the functions of collecting, transporting, packaging and exporting. They need to increase the efficiency of management, rationalize production and achieve scale economies. The next logical step for them would be to establish import companies that would directly ripen and distribute the fruit to retailers in the main import markets. However, grower organizations often lack the capital and expertise to do so, and may be drawn into activities for which they have no clear comparative advantage. Where possible, grower organizations may consider taking a stake in import firms so that they can monitor and have a say in the marketing of their fruits abroad. A more feasible solution in the short run is to market through the fair-trade distribution channels, favouring those importers who give a greater say to producers in the marketing of the fruit.

The analyses suggest that the fair-trade chain is the one that yields the highest FOB prices and export/retail price ratio, above conventional and even organic bananas. Also Fairtrade gives producers more stability and visibility through the system of guaranteed minimum price and premium. Another advantage of the Fairtrade standard is that it does not raise much the costs of production. For small-scale growers seeking to improve their incomes Fairtrade certification seems to be the most profitable option provided they can meet FLO's requirements. These include demonstrating that they have found an importer who agrees to purchase their fruit under the Fairtrade rules. As consumers of fair-trade bananas are increasingly demanding that the fruit be also certified organic, the recommended strategy is to seek double certification organic and fair-trade. Many of the organizational changes required by one of the standards will be also useful to comply with the other one. These include improving the management of the group, establishing an internal control system, enhancing produce quality and reducing the use of agrochemicals.

### **Policy implications for governments and development agencies**

Since organic and fair-trade standards raise export prices and deliver a number of public goods, it is in the interest of governments to support the certification of domestic producers to these standards. The price transmission along the supply chain is the result of the workings of the market and the power relationships among private operators. It is

therefore difficult for government to intervene within the chain. However, public policies can play a role at both ends of the chain.

On the supply side, developing country governments and development agencies should help grower groups strengthen their capacity to meet organic and fair-trade standards. Experience shows that achieving organic and fair-trade certification is a complex learning process that requires much time and expertise. It may also involve substantial investments, depending on the economic level of the farm. Groups of small-scale farmers in developing countries seldom have the necessary resources. They are unlikely to obtain certification without external assistance. Groups should be supported in their efforts to establish internal control systems and enhance product quality. More generally, strengthening the capacity of the groups through the training of their managers, administrative, financial and technical staff will increase the profitability of producers in the medium term.

Converting to organic banana cultivation entails major challenges for farmers due to the technical constraints in tropical climates. Because organic farming generates a broad range of public goods, there is a case for governmental support to organic banana farmers. More suitable production technology is needed. Research and development systems should put more emphasis on developing techniques for organic cultivation and post-harvest treatment. Since tropical pests and diseases are important cost components, research institutes should develop methods for the biological control of pests and diseases, in particular bio-fungicides to combat the Black Sigatoka and crown rot diseases. Extension teams could be trained in integrated pest management techniques so that they can in turn train farmers. An interesting approach is the use of farmer field schools to train banana growers in these techniques, and other production methods useful in organic cultivation such as composting, mulching, intercropping and crop rotation.

Organic banana growers will benefit from policies that aim at supporting the development of the organic agriculture sector in general. These include a legal framework that protects organic farmers and policies that support the emergence of domestic organic input suppliers. Certification is a key condition for accessing international markets but small-scale growers seldom have the resources to cover its costs. Government should consider policies that lower the cost of certification. The training of local inspectors in developing countries can contribute to this objective. Government should ensure that there are a sufficient number of certification bodies operating in the country and sufficient competition among them. Also, public policies should favour the establishment of domestic certification bodies and their recognition in the main export markets.

On the demand side, governments of importing countries can encourage sustainable procurement in the private sector. This can be done through various avenues. Government can give the example by adopting sustainable procurement policies in the public sector. It can also promote good practices in product sourcing and persuade trade associations to adopt them collectively. In this respect, a particular effort towards national retailer organizations seems to be necessary. Government can facilitate dialogue among players of the marketing chain on responsible pricing policies. Finally, consumers must understand the necessity to pay prices that ensure fair returns to producers' investments. Public awareness-raising campaigns promoting fair-trade and sustainable agriculture products among consumers would be helpful.

### **Areas for further research**

More field research is needed to validate the results of the analyses presented in Chapter IV. It is necessary to determine to what extent higher FOB prices lead to higher prices for growers. Evidence for the year 2004 suggests that growers do obtain substantially higher prices for certified bananas, but the more recent analyses could not go beyond the exporter level due to the lack of data on producer prices. When producer groups export directly, which is the case of most fair-trade groups in Latin America, the FOB price premium can give useful indications about the farmgate price. However, when producers sell to an independent exporter, a case which is not uncommon in the organic banana sector, the price they obtain cannot be inferred from the exporter's price. The lack of data on farmgate and FOB prices for organic bananas is a major constraint. Even the official data available on export values and quantities that were used to estimate FOB prices are subject to caution.

Also, while more data on import, wholesale and retail prices for organic bananas have become available recently in a few developed countries, these data are still limited and do not distinguish between countries of origin, thus making value-chain analysis less accurate. Farmer organizations, trade associations and government agencies in the major supplying countries would benefit from the development of national systems to collect import and retail prices.

The analyses focused on prices and their distribution along the supply chain due to the lack of data on costs. Further research is needed to examine the net profit margins of operators at the various stages of the chain, as there is a suspicion that the price premium charged by operators is not always proportionate to their costs. The extra costs entailed by compliance with the organic standard vary widely along the chain. In particular, growers bear a large share of the extra costs of organic banana due to the technical challenges of organic cultivation in tropical countries, where diseases such as Black Sigatoka are prevalent and difficult to combat with organic inputs. However, the export/retail price ratio of organic bananas tends to be similar to that of conventional bananas, suggesting that growers may not be adequately compensated for the costs of complying with the standard. Field studies are needed to obtain more data on the costs of organic cultivation.

Finally, the high degree of vertical integration of the banana industry is another constraint to the analysis. Integrated companies account for a substantial share of conventional banana exports. Similarly, large volumes of certified bananas are shipped directly by farmer organizations to specialized importers who ripen and distribute them to large-scale retailers. Therefore, a substantial share of the trade takes place within firms, making value chain analysis more difficult. Further research is needed to gain a better understanding of the internal price transmission within firms.

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# CERTIFICATION IN THE VALUE CHAIN FOR FRESH FRUITS

## The example of banana industry

Certification to voluntary standards is increasingly used by banana producers and exporters worldwide. This report deals with voluntary certification schemes, with a particular focus on those that use an on product label targeting consumers and have the potential to generate a price premium.

The report describes the main patterns of international trade in certified bananas. It examines the market situation and prospects of certified organic and fair trade bananas. It reviews the various types of benefits and challenges associated with organic and fair trade bananas from the perspective of producing countries. Export prices for certified bananas are analysed and compared to those of conventional fruit for a selection of producing countries. The report analyzes the distribution of prices along selected value chains and seeks to determine whether producing countries reap the full benefits of certified banana exports. It examines the policy implications and suggests areas for further research and action.

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