

# THE BANANA PROBLEM IN ECUADOR: A REGULATION PROPOSAL

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## 1. Background

During many years Ecuador has stand out an interest's conflict between banana producers and banana exporting companies<sup>i</sup> specially on what's related with fruit price and amount of product farmers can deliver to exporting companies.

Differences arisen due to interest conflict between parties involved in the banana business has caused the government intervention since very early time in this activity<sup>ii</sup>. Such demand has been done basically by producers, who have look for protection through laws that involves support pricing, as well as input and crop labor prices control, specially in phyto-sanitary controls.

Although Ecuador has keep an important position as producer country within the world market (at present, supplies about 30% of total), it hasn't have the chance to influence in a decisive way in the marketing area of the fruit in external markets<sup>iii</sup>. On the contrary, the country has been subjected to policies issued by multinational firms which manage the banana trade.

Making difference with other important banana producing countries, Ecuador is a producing country where many of the most important multinational firms (basically United Fruit Co., Standard Fruit Co. and Del Monte) are not producing companies<sup>iv</sup>. Such situation results in a fundamental difference, specially with Central American countries, main Ecuador's competitors.

On the other hand, this country is the only banana producing country in the world with national companies (Noboa Banana Company and the Wong Group) participation in the world market.

## 2. Analysis of the Ecuadorian banana crisis

Ecuador has always, almost since the beginning of the activity, been under crisis during the banana commercialization period<sup>v</sup>. The most important crisis, when Ecuador become the larger banana producing country of the world, was linked with the withdrawal of the United Fruit Co. from the country, followed by a banana disease which devastated crops, for what Ecuador was forced to change from the famous Gros Michel variety to the Valery varieties, of which at present the most important ones are those of the Cavendish group.

The common denominator of this crisis have been the strong seasonality of international markets, which provoke important variations in fruit prices. Although this seems to be the real reason of fruit prices' cyclical fluctuations, effects have different basis in

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Ecuador: high prices markets (the U.S. and the European Community) has been dominated by the most important multinational companies. Access to those markets, during an over-supply period due to cyclical effects, is hindered by these companies.

**Thus, when international prices get depressed, they get depressed even more in Ecuador, as transterritorial companies reduced Ecuadorian prices in order to recover themselves from losses caused by producing fruit in their own crops in Central America, which have higher production costs<sup>vi</sup>.**

Taking into account that such situation has been constantly developed in the past, national exporting companies tried to establish contacts with markets which could operate with less stress by multinational companies. Thus, several markets were open in Asia, where Japan is the most important one, in the former Soviet Union, the East Europe countries and South American countries. These markets, except Japan, are considered “marginal” ones, as they use to offer lesser prices than Europe and the U.S.; thus, these markets do not demand high quality fruit.

Every time that the Ecuadorian exporters have tried to access high prices markets, they have found entrance barriers: from dumping to an open retaliation. It’s important to highlight that the Noboa Banana Exporting Company, through its founder’s management, could access these markets; this topic needs a case study which undoubtedly will shed light on strategy to be followed in the country in order to trade this fruit.

The above described situation has carried Ecuadorian producers to a situation where **low prices are permanent<sup>vii</sup>**. This is due to two reasons: (1) Ecuadorian exporters trend to maintain low prices because they sell to marginal markets, and (2) multinational companies get benefited from Ecuadorian low prices because they recover themselves from their losses in their plantations, specially the Central American ones.

These are the conditions under which the Ecuadorian banana activity is developed.

### **3. Current outlook**

During the first 2002 quarter it was about to come into force a new trade system imposed by the EU in order to buy banana in its member countries: the “first come, first serve” system, which lies in abolishing quotas of delivering banana by countries or exporters, replacing them by one which lies in that banana could be freely marketed upon its arrival<sup>viii</sup>. Central American countries strongly opposed to this system, as they have always managed high delivering quotas to these markets, which have very attractive prices (higher average prices in the whole market).

This system will have give lots of advantages for Ecuador, as the Ecuadorian fruit, which quality is still the best one worldwide, could have a better access in the EU markets. The most important aspect of this scheme is that opposing to the U.S. market, European marketing channels are managed by small introductory and distribution firms, most of them working as associated groups or small and med traders<sup>ix</sup>.

In the U.S. and Japan, introduction and distribution channels (wholesale marketing) are managed by exporting multinational companies: United Fruit, Dole and Del Monte.

These companies have segmented markets, keeping quotas and territories, which makes impossible the presence of other middlemen. Thus, it's easy to understand the difference between producers prices per banana box and prices per box paid by buyers in countries of destination. A similar situation was hold in the EU as quotas granted to Central American countries were indirectly given to multinational companies.

Taking into account that the European market knows the Ecuadorian fruit (third part of European purchases comes from Ecuador), a free access marketing system will allow to establish direct agreements between Ecuadorian groups and European buyers-introducers, so that direct marketing means could be established, allowing margin reductions (which could have an impact in demand volumes) and better distribution channels between producers and middlemen.

Although it was a decision taken by the EU, the system never entered into force, due to North American bilateral negotiations representing multinational companies, held up its application. Thus, what seemed to introduce a structural improvement to the prices' problem faced by Ecuadorian producers, didn't caused any change, on the contrary, it allowed after a short improvement period of time the falling of Ecuadorian prices, for what these prices again felt to levels under those officially fixed by the government.

As a result of this recurrent situation, the possibility to establish a payment system which obliges exporting companies to pay prices officially established arose. A **banana trusteeship<sup>x</sup>** was proposed, which should work through a governmental organization, the Central Bank of Ecuador (BCE) for instance, where exporters shall clear its exportation and allocate the corresponding payment to that producer which fruit he/she has imported. Finally, the government designed the Ministry of Agriculture and Livestock (MAG) and the National Financial Corporation (CFN) to manage the mechanism.

The proposed system has an obligatory basis, control and is a simple one, but establishes a regulatory frame which faces buyers and sellers interests: resulting in a compulsive one and acting through a price fixation method, it generates the parties' refusal that fell affected by the mechanism.

The relative<sup>xi</sup> failure resulted of the application of the banana trusteeship shows that it's not possible to solve the problem unilaterally; it is necessary to establish procedures which will allow involved parties to reach a solution. Common interests shall be identified in order to build operative consents that will benefit all the participants.

So as to make this possible, it's necessary to establish associations to allow producers selling the fruit in better conditions. This is the analysis topic of the following numeral.

#### **4. Microeconomics concepts applied to the Ecuadorian banana analysis**

In order to understand the functioning of the Ecuadorian banana market, it's necessary to apply to behavior analysis the abovementioned concepts of Industrial Organization<sup>xii</sup>. We will focus our analysis on what's happening in the Latin American region, as this is an important one for the world banana market behavior and has a special effect on what's going on in Ecuador.

The supply sector of the Central American market is a peculiar one due to a great production concentration of the multinational companies, as they control more than 70% of banana supply originated from plantations<sup>xiii</sup>. All the Central American important production is marketed through multinational companies, thus, in this case, there is a monopolic control of fruit supply to consumption markets, as multinational companies directly and indirectly control wholesales in high prices consumer countries' markets.

The Ecuadorian case dramatically varies. At a fruit production level, according to the SICA/BIRF Project of the Ministry of Agriculture and Livestock statistical data, 80% of producers have plantations of up to 30 hectares and approximately 10% have plantations of 30-50 hectares, thus, 90% of Ecuadorian banana plantations is managed by small and med companies. Multinational companies have no direct presence as producers, while important domestic exporting companies such as Noboa Banana Exporting Company (Noboa), Reybanpac (Wong) and Costa Trading (Pons) have plantations of more than 100 hectares. However, plantations of more than 100 hectares, which also include independent producers, reach only 3%.

Ecuadorian producers use to sell their fruit to three kind of exporting companies:

- 1) **Multinational companies.** These companies buy banana to big, med and small producers, demanding a high tech production grade in order to control quality. They use to establish a selected producer regime, demanding the fruit deliver to them only. This kind of company dosing delivery volumes according to the market cycle. They generally pay higher prices than other buyers in the country, but lesser than those paid to themselves in Central America.
- 2) **Big national exporters.** These are basically represented by the three aforementioned groups. Although they own plantations, they buy most part of the fruit which is exported to small and med producers. Their international sales markets are basically Asia, Russia and West Europe. They also deliver the product (specially during high seasons) to high price markets, normally on behalf of (i.e, allowed by multinational companies). Their prices are lower than those paid by multinational companies (usually lower than the official price). They also use to classify their producers, although they are less demanding in technical aspects and keep bigger purchasing volumes during the whole year; resulting in a compensation effect for other producers, which means "pay less but get all the year long".
- 3) **Other national exporters.** There are few, about a dozen, that use to buy banana in order to export it to marginal markets, specially to Latin American countries, and lesser amounts to other markets. These companies are usually owned by med and big producers that export that product refused by multinational companies and national exporting companies, but they basically supply themselves from small producers. They usually buy low quality fruit and pay low prices, the lowest prices of the market. They are wandering in their buying volumes, and they became necessary in crisis periods, when producers can't place their fruit for exporting purposes.

This market can be studied in a behaviour patterns basis in order to determine their effect over prices, amounts and kind of industrial organization.

In the present organization, at producer level, the Ecuadorian banana market shows a competitive supply, in which many producers can't influence on banana sales prices. On the other hand, producers demand is performed by purchasers (exporting firms) as an oligopsony, as they are a few and exert an effective power on banana market for fixing prices. This power is performed by fixing quotas, using barriers, tied purchases for the use of certain services (purchase of inputs or air fumigation services, for instance) or fixation of low or high prices, according to the year time and availability of the product in world markets<sup>xiv</sup>. For instance, when climate conditions adversely affect Central American plantations, the Ecuadorian banana prices rose. This is the internal market behaviour. If we observe the world market structure, we will see a different organization.

Ecuador exports approximately 37% of world total purchases. Japan buys about 18% of its total banana imports from Ecuador. In early 1990 the U.S. used to buy Ecuador 36.5% of its total banana imports; at present, this proportion has decreased to 22.5%, giving chance the Central American banana to access these markets. As it was mentioned before, the EU buys 30% of its total banana imports to Ecuador.

Taken into account the Ecuadorian banana sales as a whole, including those exported to Asia, Russia, Eastern Europe and South America, these totals almost a 40% of the total available supply worldwide. Thus, the Central American area has a similar situation as the Ecuadorian one, so, from the international trade point of view, the supply structure has an oligopolic behaviour: main producers can exert certain power in the market, resulting in price fixation.

Is that really happening? Just partially. Due to the aforementioned aspect, the Central American production is characterized for the identification between producers and buyers, as multinational companies control the production of the larger planted area. In this case, a monopolic power in the fruit production is observed, which is obtained by an oligopsony that manages the production monopoly: a contradiction between buyers and sellers is not necessary; on the contrary, as entrepreneurs own both production (supply) and purchases (demand), they can choose where profits are going to happen and the way they get benefits. But controlling production of a very important portion of world supply, allows multinational companies to fix prices at world consumption level, effectively acting as an oligopoly in international markets.

Things are different in Ecuador. As it was shown before, fruit production (supply) works through competitive conditions, except for direct plantations owned by exporting companies (less than 3% of the total), plantations belong to independent producers, small ones most of them. Thus, there is no market power at supply level, so amounts and prices cannot be affected.

However, there is an interest contraposition at buyers level. From the fruit buyers point of view, they make up an oligopsony, thus, they have the ability to fix purchase prices. The difference between oligopsony members is important: oligopsony within the internal banana market is compound by agents with the abovementioned characteristics

and domestic exporters (two categories). We will keep these two groups for market behaviour analysis of buyers.

There is a market situation between these two groups seen as the Nash-Stackelbert<sup>xv</sup> equilibrium: multinationals (leaders) are benefited from low prices for selling the product at high prices; domestic exporters (followers) shall fix low prices in order to access low prices marginal markets. Leaders establish the market segmentation which shall be followed by followers.

This situation could result in a **bilateral monopoly**<sup>xvi</sup>. In order to get this, it's necessary that suppliers (direct producers) make easy its production control ability. But, as there are lots of them spread through the whole region, associations' formation has a slow process and needs too much effort. However, it's possible to do it; the most important and current example of this kind of organizations is the *Federación de Cafeteros de Colombia* (Colombian Coffee Growers Association). The Colombian coffee growers use to compete with big countries like Brazil or African countries. Juan Valdez for instance, sells Colombian coffee to developed countries at very high prices, as he introduced the product like a trademark and a niche was developed as a delicatessen<sup>xvii</sup>.

The main purpose of this organization is to create a producers' market power to be focused as a power exerted as a producing and exporting country. A result to be negotiated will be obtained because when a bilateral monopoly arises, the solution is referential, as the result depends upon the negotiation power exerted by parties.

An appropriate mechanism is necessary to make this organization works. At the beginning, the Ecuadorian banana case conditions shall be ruled by the government.

## **5. A ruling mechanism for the banana activity (proposal)**

If the country decides to adopt as a national policy the development of a negotiating ability in order to establish international marketing conditions of its banana production, then the government shall take actions for beginning a process in which this ability is developed at a national productive agent level.

The Ecuadorian advantage for beginning this kind of activity is that there are already many important national exporting companies, which knowledge of world markets as well as the marketing infrastructure they have (selection, storage, transportation, reception, channels, etc.) are part of a national asset needed to improve the activity functioning.

If state adopts the necessary regulatory capacity, it could use the monopolic power that it already has over the Ecuadorian fruit and use appropriate market power mechanisms in order to establish a market differentiation. On the other hand, it will be necessary to establish the National Banana Growers Federation to gather producers and buyers, a compulsive one, but based on a national consensus policy in which all the involved agents of the banana sector shall be included<sup>xviii</sup>. It's also urgent to establish a biogenetic investigation and agricultural and ecological structure because the country must defend its ability to control an important portion of the world supply.

The following are the main points of the regulatory frame which could rule this activity<sup>xix</sup>.

- In order to avoid prices decrease more than what the cyclical market imposes, the country shall discriminate prices according to those markets where it sales. Once historical volumes traded to different destination points have been known, firstly the State, and then the corresponding private or semi-private organism, must fix maximum exporting quotas by destination country (boxes or metric tons); simultaneously, a price must be allocated to each market, so that exporters can agree with producers how much they are going to buy for each market and a price will automatically established.
- The creation of the National Banana Growers Federation shall be actively promoted by government, looking producers and exporters participation, but also obligating the corresponding affiliation. This federation shall also obliged exporters to participate; national exporters must have an effective representativity, while multinational companies' exporters shall only have the opportunity to express an opinion. The banana federation main function is to develop policies and define the legal environment, including production, planted area, prices, bans, etc.
- The federation will also be obliged to make banana research on bio-genetics, ecology and agronomy to be necessarily developed by universities and polytechnic schools of Ecuador. The aim of this activity is to protect, develop and promote the strengthening of fruit supply. Alliances and agreements with foreign research universities in order to improve local universities' operation, is suggested.
- A permanent research of markets shall be developed by the federation, which will include prices tendency analysis, market cycles prevention, advantage of favorable opportunities, among others. It must also promote new markets and improve those existing ones; thus, promoting the South American markets in order to improve consumption quality, prices could be risen.
- Finally, the federation could be financed with the contribution of its member quotas, beginning with a dotal fund granted by the government to be paid upon the parties agreement; time in which the state shall withdraw itself from the federation in order to allow the private sector to manage it. Producers and exporters shall contribute with a portion of the amount they receive in order to strengthen the federation financial system. On the other hand, rates to be paid by agents could also be discriminated; i.e., fruit exported to high prices' markets shall pay highest rates.

Summing up, the proposal suggests in a general way, that Ecuador shall use its negotiating capacity in order to get advantages both in quantities and prices. Thus, it's necessary that agents involved in the banana activity strongly participate in it, in order to get the highest long term benefits.

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<sup>i</sup> Larrea C., Espinosa, M. and Chavert, P. *El banano en el Ecuador: transnacionales, modernización y desarrollo (Banana in Ecuador: transterritorial firms, modernization and development)*. Quito, 1987.

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<sup>ii</sup> Castillo-Figueroa, Jessica. *Leyes regulatorias y su efecto en la economía: el caso del banano ecuatoriano (Regulatory laws and its effect in the economy: the Ecuadorian banana case)*. University thesis for obtaining the title of economist. ESPOL, Institute of Humanistic and Economic Sciences. Guayaquil, 2000.

<sup>iii</sup> The SICA Project's/BIRF data, Ministry of Agriculture and Livestock. Quito.

<sup>iv</sup> Larrea C., Espinosa, M. and Chavert, P. , *El banano en el Ecuador: transnacionales, modernización y desarrollo (Banana in Ecuador: transterritorial firms, modernization and development)*. Quito, 1987.

<sup>v</sup> Alfredo Vera A., in *La historia de un triste banano (The story of a sorry banana)*, Ed. Claridad, 1977, dramatically describes this situation.

<sup>vi</sup> Based in several interviews to producers, exporters and people involved with fruit marketing, as well as interviews to Central American producers, it is shown that prices have a different behavior in each country such as Ecuador and Costa Rica, for instance.

<sup>vii</sup> This have been continually established by several analysts and studioses of the Ecuadorian banana situation, for instances, a survey by Jose Riofrío, *Banano ecuatoriano: perspectivas (Ecuadorian Banana: outlook)*, Ed. Producciones Agropecuarias, 1997.

<sup>viii</sup> During the proposal discussion , main Ecuadorian newspapers were full of news and comments in this respect.

<sup>ix</sup> This kind of relationship between producers and middlemen is typical in the delicatessen markets of Europe for exotic products. Banana has this category in many markets. See Jorge Chang, *Efectos de la dolarización en el costo de producción de banano en el Ecuador (The dollarization effects in the Ecuadorian banana production cost)*, Fundagro, 2000.

<sup>x</sup> System proposed by producers' associations that recognize themselves as representatives of producers in general, although there is a dispute in this respect. The trusteeship proposal appears in many newspapers; based in a bibliographical review, there is no data about a representative of the exporting companies supporting this proposal.

<sup>xi</sup> See news issued by Diario El Universo during November 15-25, 2002; producers and exporters adherents' number didn't even reach the third part of producers and it didn't summon any big exporter.

<sup>xii</sup> The Industrial Organization is an almost new branch of the Economics Theory which is in charge of analyzing the way markets are organized, taking into account all those imperfections they have which prevent results to exactly fit in formal models of the theory. In the Industrial Organization analysis emphasis is made in transaction costs as well as in contributions of a just developed Economy of Information (Inés Macho-Stadler and David Pérez-Castrillo, *An Introduction to the Economics of Information*, Oxford University, 1997). The Industrial Organization is a discipline used to establish a regulatory frame necessary to correct the optimum solutions markets' deviations. A sound introduction to this theme is found in Dennis Carlton and Jeffrey Perloff, *Modern Industrial Organization*, Addison-Wesley, 1994.

<sup>xiii</sup> J. Chang, *Bananeras ecuatorianas necesitan mejorar su productividad (Ecuadorian banana companies need to improve their productivity)*, Fundagro, 1999.

<sup>xiv</sup> Larrea C., Espinosa, M. and Chavert, P. *El banano en el Ecuador: transnacionales, modernización y desarrollo (Banana in Ecuador: transterritorial firms, modernization and development)*. Quito, 1987.

<sup>xv</sup> This kind of equilibrium shows that no participant is willing to change the organization; i.e., leaders a happy to be leaders and followers are happy to be followers: both realize that a condition rupture will be harmful for both of them. A more formal explanation can be obtained from applying the Games' Theory principles. See Jean Tirole, *The theory of Industrial Organization (Teoría de la Organización Industrial)*.

<sup>xvi</sup> This is a referential solution case, as it's necessarily negotiated between the parties, because none have enough power in order to impose its own interests. A formal analysis could be found in J. Henderson and R. Quandt, *Teoría Microeconómica: un enfoque matemático (Microeconomic theory: a mathematical focus)*. Ed. Ariel, 1996.

<sup>xvii</sup> The story of Juan Valdéz and his donkey is a very famous one, easily found in the best T.V. commercial places in the U.S. and European countries as well as in many airports. This advertising is synonymous of Colombian coffee.

<sup>xviii</sup> An interesting case is the State participation with entrepreneurial groups in the brand new industrialized Asian countries. The system was developed in a concerted way between the government and the entrepreneurial groups, previous the establishment of certain rules which demanded the withdrawal of official organisms and a total privatization, in the following countries Japan, Korea, Hong Kong, Singapore and Malaysia among others.

<sup>xix</sup> Ideas shown in the text are suggestions and its aim is to propose a mean of organization that can create a market power, taking advantage of those conditions in which the Ecuadorian banana production is developed.