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# Are Geographical Indications a way to “decommodify” the coffee market?

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**Abstract** — The commodity nature of green coffee is the main cause of “the coffee paradox” (decreasing prices at production level and rising prices at consumption level). So, a requirement to reach a less unfair distribution of the added value between the supply chain would be to “decommodify” the coffee market not only at the final consumer level, but also at the production level. Certifications (like Fair Trade, Organic, Rainforest Alliance, Utz Kapeh, or Bird-friend) are often presented as a way to reach this result, but according to some authors these schemes seem to be rather an extension of the standardization wave to new quality attributes (linked to social and/or environmental characteristics of the production process). Geographical indications (GIs) seems to be very different in this respect. GIs’ Codes of practices (which include the delimitation of the production area and a description of the production norms and product quality) are normally elaborated by the local actors themselves, who are able to define the link to the *terroir* (physical and anthropic characteristics of the production area). The aim of this article is to question the ability of GIs to “decommodify” the coffee market also on the production side, and contribute to a fair distribution of the benefits of decommodification. The paper is based on the analysis of the design process of a GI coffee in the Jarabacoa region (Dominican Republic), which led to a very selective Code of practices but not so specific with regard to the link with the territory. The article evidences the chain of causality that brought to such a result, and debates to what extent the case can be considered as context-specific. Given that it appeared that most of the determinants are generic to the coffee world, the relevance of GIs as a tool to “decommodify” the coffee market must be qualified.

**Keywords**— Coffee; Geographical Indications; Collective action.

## I. INTRODUCTION

A commodity is a standardized good with a homogeneous quality. Decommodifying a market means to

differentiate the product in order to reduce the substitutability between the suppliers and, by so doing, to improve the share of the added value captured by the suppliers. In the 18th and 19th centuries, the international market for green coffee was highly decommodified. Indeed, the coffee of each farm used to be sold separately in auction markets in London, which gave an important role to the reputation of single farms [1]. Although this “old” system has not completely disappeared (there is a small niche market for “estate coffees”, or coffees coming from specific farms), with the development of future markets and the emergence of family farms producing coffee before the World War II, the organization of the market completely changed [2]. Green coffee is now a commodity classified according to a few criteria. The coffee variety (Arabica versus Robusta) and the type of post-harvest process (washed versus unwashed coffees) determine the three most important coffee classifications: washed Arabica, unwashed Arabica, and Robusta. In each of these big categories, the coffee is classified according to the country of origin and the grade (bean size and number of defects). The commodification of the market is completed by the know-how of the roasters, who know how to substitute a grade from a specific country by another grade from elsewhere, changing the percentages in their blends.

Recently (and in particular after the collapse of the International coffee agreement in 1989), the standardisation of the coffee market was often presented as a problem. Indeed, the commodity nature of green coffee is viewed to be the main cause of “the coffee paradox”, characterised by decreasing prices at the level of production and rising prices at the level of consumption [1]. According to Daviron and Ponte [1], the economic value of coffee is not generated by the raw material (green coffee), but rather by the ways of combining different coffees in blend, of roasting them, of marketing them (symbolic attributes), and by the services offered in bars and coffee shops. Firms in downstream stages of the supply chain (normally operating in big consumer countries) are able to satisfy the changing consumer needs (adding value to the final product) without involving upstream firms.

Therefore, a way to reach a less unfair distribution of the added value inside the supply chain would be to creating a direct link between the “decommodification” now advanced on the final coffee market (characterised by the growing demand for speciality coffees) and the producers’ market. Certifications of particular process and/or product attributes are often presented as a way to create this link and, by so doing, to differentiate or “decommodify” the coffee market [3] [4]. Indeed, many types of certifications now exist for coffee and are growing rapidly: Fair Trade, Organic, Rainforest Alliance, Utz Kapeh, Starbucks, Shade grown, Bird-friendly... However, the impact of these certifications on the “decommodification” of the coffee market on the production side is doubtful. Indeed, the Code of practices (standards) of all these certification schemes have been designed by the downstream part of the coffee chain (either by buyers -like Starbucks- or institutions not involved in the trade -like Flo International-), and are the same all over the world. Consequently, the development of the certifications may be interpreted as a simple extension of the standardization to new attributes (linked to the social and/or environmental characteristics of the production process). Anyway, the increasing interest of the coffee growers in these new market macro-segments increase the internal competition and lower economic returns for coffee growers, who at the same time have to bear increased production costs [5]. Moreover, the entry of big multinational players and of big supermarkets chains into these market segments lowered the prices of the certified coffee at the consumption stage.

The case of geographical indications (GIs) seems very different. According to the TRIPS Agreement (1994), GIs are “indications which identify a good as originating in a territory [...] where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin” (Art. 22.1). The recognition of a GI establishes a collective intellectual property right over the geographical name of the product, allowing only producers respecting the link of the product with its geographical origin to use the geographical name on the product. These characteristics seems to give to GIs a high potential of decommodification (compared to others certifications). Indeed, the recognition of a GI is

usually based on a codification of the delimitation of the production area and of some production norms and product characteristics, defining in this way specific (unique) products. Moreover, the Code of practices is normally elaborated by the actors belonging to the local production system (firms of different stages of the supply chain and other stakeholders, with the support of local public administrations and development agencies). The collective and local dimension in the definition of the rules, the possibility of making rules linked to a specific context (geographical and anthropic), and the specificity and uniqueness of the related product qualities may offer some important opportunities to GIs with regard to other process and/or product attributes certification schemes. At the same time, they pose some problems in the constitution process and in establishing an effective link with the consumers [6] [7].

As a matter of fact, GIs are developing rapidly in the coffee world [8] [9], and many expectations are entrusted in this tool even if its effectiveness is discussed [10].

The aim of the article is to question the ability of GIs to “decommodify” the coffee market on the production side. In other words, the aim isto question the GIs potential to transfer benefits coming from the decommodification of the final consumption to the coffee growers side, which relies on two main elements: effectiveness and fairness. We will say that a GI is effective if it is able to generate a surplus for the local system through differentiation, due to the remuneration of the specific qualities.

A GI is fair if the distribution of this surplus satisfies some criteria of justice. Due to the central position of Rawls’ theory in the debate on justice, we choose to use Rawls criteria to check the GI fairness [11]. The “fair equality of opportunity principle” says that two people endowed with the same talent should have the same possibilities to accessing the different social positions. In the case of GIs, we can consider that the “social position” is the right to use the GI and that the “talent” of the agents is linked to their potential for quality/typicity and to their legitimacy to use the protected GI. The “difference principle” states that the differences in advantages coming from the different social positions should benefit to the more disadvantaged people. In the case of GIs, this means

that the poorest farmers should be included in the GI, or benefit from the GI without necessarily being included in it (positive externalities).

## II. METHODOLOGY AND AIMS

The paper is based on an in-depth analysis of the design process of a coffee GI in Dominican Republic: the GI “Pico Duarte coffee”. So far, an ex-post evaluation of the results of this GI is not possible, because of the recent birth of this initiative. At the same time, it is very important to identify critical points, opportunities and limits of the GI tool, considering the lack of empirical evidences, the high number of on-going GI initiatives around the world, and the interest for a definition of effective public supporting policies.

Moreover, the achievement of the potential of GIs for decommodification depends a lot on the GI design process which specifies the rules of the GI. So, in order to identify the factors that can undermine the “decommodifier” role of GIs, we have to focus on the decision-making process of GI’s Code of practices (delimitated area and norms).

Concerning Pico Duarte coffee, it was possible to access to very good data about what occurred inside the decision-making process: minutes of the meetings of the team that defined the rules of the negotiation game, slides presented during the negotiation game including the possible options to be discussed and information about their advantages and drawbacks, the paperboards with the first best and second best expressed by the groups of stakeholders (producers, traders, institutions), and direct interviews with different participants.

The Pico Duarte GI initiative was launched in 2006 to solve the problem of lack of incentives for quality (adverse selection phenomenon) in the coffee system in the region of Jarabacoa, localized in the north slope of the main mountains chain of the Dominican Republic (Cordillera Central). Supported and oriented by the Dominican Government and by external cooperation agencies (USAID and Agence Française pour le Développement), the GI design process came out into a Code of practices oriented by principles and criteria that are not endogenous to the local system and not specific to local coffee territorial specificity.

Moreover, the process brought to a very small production area, and to very exclusive production norms and green coffee quality requisites. For these reasons, as we will see, the outcome of this collective decision-making process can be viewed as ineffective and unfair.

The aim of the article is to evidence the chain of causality that has produced such a result, to identify the structural factors that cause it, and to discuss to what extent these factors can be considered specific to this case study or can be generalized.

We will first present the initial situation and the birth of the GI initiative. Then, we will present the two rounds of negotiation and their result. Finally, we will discuss the chain of causality and its possible generalization to other coffee GIs before discussing some lessons drawing from the case study and concluding on the relevance of GIs as a tool to “decommodify” the coffee market.

## III. INITIAL SITUATION AND BIRTH OF THE GI INITIATIVE

The Jarabacoa coffee system is representative of the many coffee systems all over the world.

First, it is characterized by a dual production structure, with the coexistence of small family-farms and big capitalist farms (almost always localized in the highest areas which are more favourable for producing quality coffees, using intensive practices, specialised on coffee production, and with access to the international market). In the case of Jarabacoa region, according to the Geocafé project data base (<http://edcintl.cr.usgs.gov/geocafe/index.php>), the capitalist farms represent 4% of the farms, own 52% of the coffee cultivated land, and produce 67% of the coffee.

Second, another important characteristic is the marginalisation of the lower areas. This evolution is classical in the coffee world, because the lowest areas are less adapted for producing good quality coffee and have more production alternatives. In the case of Jarabacoa, a chronologic comparison of the different sources of data shows that the number of coffee farms below 700 m has been divided by four since 2001. However, it is important to note that part of this evolution is due to a change in the definition of what is

a coffee producer in statistical sources: the small and diversified producers of the lower areas are also marginalised in the mind of coffee experts.

The third characteristic of the Jarabacoa coffee system (which is also common to many coffee systems in the world) is the high concentration of activities at the downstream level of the local market chain. In the case of the Jarabacoa region, the structure of the local market chain can be characterized as duopsonistic. Indeed, the main coffee firm of the zone is producing in his own farms about 30% of the coffee of the zone, and trading about 60% of it. All the others traders in the area (around 35) are working to supply the main roaster of Dominican Republic, who is proposing the same price without making any quality differentiation. Last but not least, producers' loyalty towards buyers is widespread. This is also a very common situation in the coffee world: the personal relationships with the same buyer allow the producers to access to credit from the coffee buyer. But, as the producer has to repay his/her debt, he/she has not the opportunity to arbitrate between different buyers. In the Jarabacoa region, according to Geocafé data, 60% of the producers never change their trader.

Performances are also similar to many coffee production systems in the world. Apart from little quantities exported at high prices by some big producers (as estate coffees), the main part of the exported coffee is sold in the bulk market at low prices. As this coffee is consumed as blends, external consumers (both roasters and final consumers) do not know the name of the region or the country of production. In the case of Jarabacoa, around 80% of the exported coffee is sold to Italy at a (low) premium of 7 US \$ / QQ (according to Codocafé database) which represent an average premium of only 7%. As more than 80% of the exported coffee from Jarabacoa is exported using the name of another (more reputed) production zone of Dominican Republic, even the roasters do not know the name of Jarabacoa.

The situation is quite similar in the domestic market, where coffee is paid at a price closed to 80% of the price of the "C contract" of the New York Board of Trade (whatever its quality). Part of the coffee is blended with others Dominican coffees and sold with the registered trademark Café Santo Domingo without any mention of the production

zones. Another part is roasted and sold as pure origin through the trademark Café Monte Alto. However, the name of Jarabacoa is not put in evidence on the package and Dominican people usually do not know that this coffee comes from Jarabacoa.

The birth of the GI initiative is a result of two events: the creation of the Cluster Café de Jarabacoa (CCJ) and a study on coffee quality in Dominican Republic that evidenced the high quality potential of the Jarabacoa region and some other neighbouring production areas such as Constanza and Juncalito.

The Cluster de café de Jarabacoa (CCJ) was created in May 2005. The setting-up of the Cluster had nothing to do neither with the GI, nor with the identification of some common objectives by local actors. It was rather a process activated and funded by external actors (USAID) who chose the coffee sector in the region of Jarabacoa almost by accident (good relationships between a coffee producer of the zone and the USAID).

The idea of the GI initiative came from the project PROCA2 funded by AFD, the aim of which is to help the Dominican coffee supply chain to improve the quality and the product promotion to get higher premiums on the international market. The implicit idea of the project was to develop origin-based quality signs (GIs). PROCA2 ordered a study to IDIAF (Dominican research institute on agriculture) with the objective to identifying and delimitating the different zones with potential for quality, and to characterize the specific potential quality attributes of the coffee in each zone. The study was performed by IDIAF with the help of CIRAD (a French research institute on tropical agriculture) during the harvests 2003-2004 and 2004-2005. The methodology of the study mobilized many scientific data: soil maps, topographic maps at scale 1:50000, empirical knowledge of the local coffee technicians, altimeters, analysis of samples of soil, analysis of samples of coffee harvested and processed following the norms of coffee manuals. The cup tasting and chemical analysis were also performed using international norms: ISO norm 6668:1991 for roasting and tasting, ISO norm 11294 for Near Infrared Spectrometry, and ISO norm 10095 for High-Performance Liquid Chromatography. The main result of this study was that the best zone for coffee quality is the north slope of the Cordillera

Central (included Jarabacoa but also the neighbouring zones of Constanza and Juncalito). However, the high acidity and the fruity, two of the most important and asked coffee quality attributes, did not appear in the lower areas (below 700-800 m).

As the study revealed a gap between the potential and the effective level of quality of the coffee from Jarabacoa, it gave the idea to the Cluster to develop a geographical indication. Therefore, the GI was conceived as a standard able to achieve two results at the same time: give a good process and production quality standard for local producers, and gain an extra price on the market. In this way the vicious circle "low prices-low quality-low prices" could be interrupted.

At the beginning, the name chosen by local actors for the GI was "Café de Jarabacoa", but this name was already registered by a private firm (this is allowed by the Dominican law, and many geographical names are registered as private coffee trademarks). That is why, after the second round of negotiation, the name turned into "Pico Duarte coffee", where Pico Duarte is the name of the highest mountain in the Cordillera Central and in all the Caribbean region. Indeed, Pico Duarte could be an identitary name even for other coffee areas in the Cordillera central such as the already mentioned neighbouring regions of Juncalito and Constanza.

#### IV. THE ACTORS OF THE JARABACOA COFFEE SYSTEM AND THEIR EXPECTATIONS ON THE GI

The GI initiative launched by the Cluster encountered a generalized good interest in the Jarabacoa coffee system.

The expectation from the GI was an increase of revenues by means of higher prices, expected from three different mechanisms: higher quality standards reached by the local system; more homogeneous characteristics of the coffee lots; and identification of local coffee as specialty/origin coffee on intermediate markets and/or consumers markets.

Due to the heterogeneous structure of the local system and to power unbalances, the different local actors put different expectations from the GI.

In particular, coffee producers and their co-operatives were interested in diversifying the

marketing channels, opening new commercial opportunities to escaping to the internal monopsony. But even within the farmers a high differentiation can be observed. Some of them are located inside the borders of the Municipio de Jarabacoa, whereas others have their farm in the neighbouring zones of Juncalito and Constanza. The farms have different quality potential according to their altitude: low (below 700-800 m), medium (between 700-800 m and 1000 m), or high (above 1000 m). The big and some medium coffee producers use intensive production practices that are good for reaching higher coffee quality, or can adopt them without bearing prohibitive costs. For other farmers, it would be very difficult to comply with very restrictive norms needed to reach high-quality levels. Obviously, each category of producers has interest to be included in the GI. The question is to know whether the others have interest to include them or not. For example, the producers from the highest part of the mountains have interest to exclude those from the lowest part who cannot produce a coffee with special flavours. Their inclusion can be seen as a menace for reaching high quality coffees and consequently for the reputation of the new GI.

Local processors and traders oriented to new "decommodified" coffee markets are interested in the standardisation of the local coffee production on higher quality levels, in order to reduce transaction, control, and coordination costs. The local Fair Trade certified producers' organisation (localized near the region of Jarabacoa) is not interested by linking coffee to territorial origin, and perceive the GI as a threat.

The expected effects from the GI are different depending on different actors: processors are mainly interested in effects internal to the supply chain (high quality and more homogeneous lots of green coffee), producers and their co-operatives and associations are mainly interested in effects on the external market (GI is conceived as a marketing tool able to create a good reputation for the name of the coffee and new demand of specialty markets).

Local public institutions (in principle) and coffee producers as well are interested also in keeping coffee cultivation, not only for economic reasons but also for environmental issues as water, soil fertility, and biodiversity. The support to coffee was viewed also as a means for poverty alleviation.

According to the nature of the property right (collective, because linked to a geographical name) and to the procedure defined by the national Dominican law, a definition of collective rules (Code of practices) for the GI was needed. Then, a decision-making process began, the aim of which was to design the GI Pico Duarte Code of practices which included the definition of the production area, the production norms, and quality classification norms.

## V. THE FIRST ROUND OF NEGOTIATION

The first round took place on September 2006 in Jarabacoa. The process can be divided in two steps: the definition of the rules of the game (or the meta-game) and the negotiation game itself.

### A. *The definition of the rules of the game*

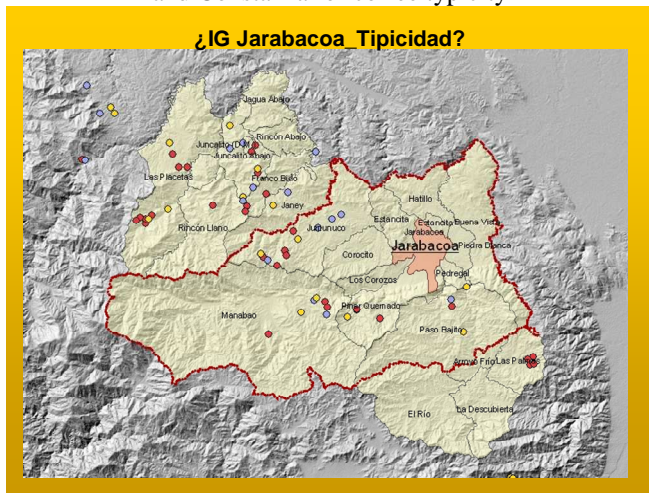
As it was the initiator of the GI process, the Cluster had the responsibility and the legitimacy to define the rules of the game of the collective negotiation. However, the IDIAF-CIRAD-CNEARC-PROCA2 team (now called “the Team”) was perceived to hold the scientific knowledge (on GIs, on coffee quality, and on coffee production and marketing systems). For that reason, this team was charged by the Cluster to define the options regarding the contents of the Code of Practices and to produce and give some information on their respective advantages and drawbacks. In practice, the Team went beyond its mandate because he also proposed to the Cluster a list of persons to be invited to participate to the game and a way to organise the collective decision-making process.

This Team was formed by researchers. It was guided by the will to be simple and neutral. However, the minutes of their internal discussions showed that they were all in favour of including the neighbouring zones of Juncalito and Constanza, which would have brought to an enlargement of the geographical area outside Jarabacoa region. Indeed, a big GI including all the North Slope of the Cordillera Central was perceived to be at the same time more inclusive and more efficient (more consistency with scientific data on coffee quality, more exportable quantities, and, by so doing, higher economies of scale on monitoring, control, and promotion).

On the other hand, the Team had expressed less clear preferences concerning the production norms (coffee cultivation techniques, despulping, drying, etc.) and the “vertical” dimension of the area (minimum level of altitude) because of the trade-off between the level of exclusion and the probability of success of the reputation building strategy (high altitude and strict production norms increase the probability of occurrence and the intensity of the fruity attribute). In order to avoid a complicated debate on a very technical question, the Team decided not to include the classification norms in the debate. A possible option would have been to propose smaller zones than the municipality of Jarabacoa, what would have been consistent with the fact that many producers identified themselves and their coffee with micro-zones [12]. But this would have weakened the option of the big zone because the option of the municipality of Jarabacoa would have appeared as an in-between option. Finally, the four options were presented for the delimited area, crossing two scenarios for the horizontal dimension of the GI area (Jarabacoa versus Jarabacoa + Constanza + Juncalito) with two scenarios for the vertical dimension of the GI area (all ranks of altitude versus > 700-800 m). The threshold of 700-800 m came from the study on coffee quality potential which showed that in the north slope of the Cordillera Central, the fruity attribute almost never appear under this level of altitude. Besides the four options affecting the geographical boundaries, two other options were presented for the production norms: option A with few restrictive norms (especially on the aspects for which the gap between “good” and real practices is high) and option B with more restrictive norms (in order to guarantee a higher quality level).

In relation to the information given to the players on advantages and drawbacks of the proposed options, the Team’s presentation stressed some advantages of including the neighbouring zones of Juncalito and Constanza. The first argument was linked to the similarity of the coffee of the three zones. This information (based on scientific data) was presented in the form of a map (see figure 1).

Figure 1: The similarity of the zones of Juncalito, Jarabacoa and Constanza for coffee typicity



Note: fruity flavor is represented by the red points

Source: Extract of the Team's presentation during the first round

The second argument was based on the increase of the number of coffee producers and hectares if the neighbouring zones were included. It was presented in the form of a graph (see table 1). Besides, the final slide of the presentation underlined the economies in costs of traceability, promotion, and control that a wider area would permit to reach.

Table 1: Number of coffee producers and hectares in the four scenarios related to the definition of the geographical boundaries

|                       | Jarabacoa + Juncalito + Constanza                    | Jarabacoa   |
|-----------------------|--|---|
| All ranks of altitude | Nb of coffee producers: 3400<br>Nb oh hectares: 6250 | Nb of coffee producers: 700<br>Nb oh hectares: 2000 |
| > 700 – 800 m         | Nb of coffee producers: 1600<br>Nb oh hectares: 5000 | Nb of coffee producers: 550<br>Nb oh hectares: 1875 |

Source of the data: Team's presentation during the first round

The Team also made some proposals regarding the players (who should participate to the negotiation game) and the organization of the decision-making process. However, as the Team did not have any mandate on these aspects, its proposals were discussed with the Directive Board of the Cluster and modified. The proposal of the Team was to invite also actors coming from outside the municipality of Jarabacoa (producers from the region of Jarabacoa, Juncalito or

Constanza and traders from all the country). In relation to the organization of the collective decision, the proposal was a three steps process with i) a plenary session where the PROCA2-IDIAF team would give information about the options and their advantages and drawbacks, ii) a session articulated into three groups (producers, traders, institutions) in order to identify the preferences (first and second choices) of each group, and iii) another plenary session of restitution of the works by the different groups and of collective debate.

Those proposals were submitted to the Directive Board of the Cluster. The Cluster should logically prefer to restrict the delimited area to the municipality of Jarabacoa (its legitimate area of intervention) in order to keep the control of the GI. Moreover, it should logically do not care a lot about the producers of the lowest zones because they are bad represented and little involved in the Cluster. The members of the Cluster's Directive Board (one representative of the biggest coffee firm of the Jarabacoa region and six representatives of the producers) have also their own preferences. How did they react to the Team's proposals regarding the players and the organization of the decision making process? Initially the biggest coffee firm of the Jarabacoa region was against the presence of actors from outside the municipality of Jarabacoa. The negotiation leads to a compromise: to invite producers from the neighbouring zone of Juncalito and Constanza, but no traders. However, the letter of invitation sent by the Cluster was insisting a lot on coffee from Jarabacoa without explaining that the initiative was opened to the neighbouring zones<sup>1</sup>. Moreover, all those actors were invited only for the debate (in the morning), while the final decisions should be taken by the Cluster in a fourth step (in the afternoon). The three steps process proposed by the Team was accepted. The Cluster's Directive Board only added some elements in the first step especially a presentation of the Cluster with its objectives and its achievements. The decision rule has not been discussed although it is crucial because if there is an anonym vote, the producers may have some power

<sup>1</sup> The text of the letter was "Information Meeting and debate about the proposal of GI Café de Jarabacoa elaborated by the Cluster Café de Jarabacoa as strategy of valorisation of the coffee produced in the zone" (our underlined).

(they are represented by six persons) but if the discussion is taken by public vote, it gives an advantage to the biggest coffee firm because the producers will not dare to oppose to him. Another point of discussion was related to the place of the meeting. The biggest coffee firm proposed to do it in its conference room but the Team succeeded in defending the more neutral option of a theatre of the university.

### B. The game played and its results

*Step 1.* For different reasons linked to the presence of CODOCAFE's Executive Director in Jarabacoa at the meeting, the round began with a delay of two hours. Very few producers came from Constanza and none from Juncalito. They followed the presentation performed by the Team (so, they were aware that they could join the GI initiative), but they left Jarabacoa before the second step (they did not participate to the debate).

Figure 2: First and second bests of the traders working group

|                     | NORTAS A | NORTAS B |
|---------------------|----------|----------|
| JUN. > 400m         | 2        |          |
| JUN. > 700m         | 1        |          |
| JUN. + otras > 400m |          |          |
| JUN. + otras > 700m | X        |          |

Source: Part of the paperboard of the "Traders" working group

*Step 2* was a discussion inside three groups (producers, traders, and institutions) about the advantages and drawbacks of the different options and the preferences of each group (first and second choice). The working group "Producers" was composed exclusively of producers from the Municipio de Jarabacoa (included producers from the lower areas). The group was hesitating a lot. The president of the Cluster (who is a medium producer

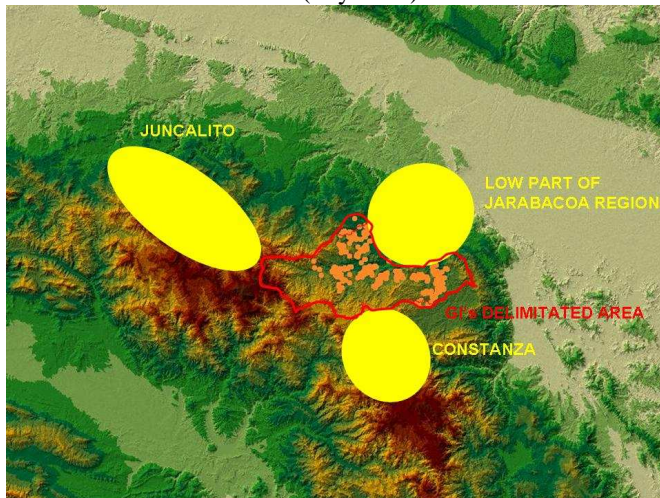
from the high part of the municipality of Jarabacoa) had a great influence on the debate. Finally, the group was in favour of strong production norms and of the exclusion of the farms below 700-800 m (in spite of the protest of the producers from the lower zones who were willing to join the GI). It was also in favour of the large option (with Juncalito and Constanza). Like the producers, the working group "Institutions" was very sensitive to the arguments of the Team concerning the homogeneity of the coffee in the three zones (fruity attribute), the economies of scale that can be reached at the level of the large zone (Jarabacoa + Juncalito + Constanza), and the will to include as much producers as possible. They chose the same first best as the producers. On the contrary, the working group "Traders" chose as first best to restrict the area to the highest part of the municipality of Jarabacoa and to adopt restrictive production norms. They hesitated for the second best between opening the door to the neighbouring zone or to the low areas of Jarabacoa. Finally, they chose the second one, a decision which was probably conditioned by the opinion of the biggest coffee firm of the Jarabacoa region (see figure 2).

*Step 3* (which should be the restitution of the results of the working groups and collective debate) did not occur because time was lacking.

*Step 4* was the effective decision-making process. It occurred in the afternoon. After the presentation of the results of the different working groups (by the members of the IDIAF-PROCA2 team who animated each group), the participants expressed their position. There was a consensus on the question of the exclusion of the lower areas and on restrictive production norms. The president of the Cluster himself defended restrictive norms with the argument that, if the price increases sufficiently as effect of the GI, everyone would succeed in complying with the norms. So, the debate was focused on the question of the inclusion of Juncalito and Constanza. Many institutions expressed a position in favour of the large area whereas the director of the main coffee firm of the Jarabacoa region was clearly against the inclusion of the neighbouring zones. The discussion was not followed by a formal decision (no vote occurred). The director of the biggest coffee firm of the Jarabacoa region summed up the discussion by the proposal to

include neither the neighbouring zones of Juncalito and Constanza nor the farms of the Jarabacoa below 700 m, and to adopt restrictive norms. To reach an agreement, he opened the door to a future integration of the neighbouring zones, telling that it is better to begin with the region of Jarabacoa alone. Nobody opposed and this has been interpreted as a decision of the Cluster by consensus<sup>2</sup>. The delimited and excluded areas are represented in figure 3.

Figure 3: Delimited area of the GI (in red) and excluded areas (in yellow)



## VI. THE SECOND ROUND OF NEGOTIATION

The second round occurred on March 2007. Its objective was to take a decision for the GI production norms and to design a classification for the (future) certified coffee. Indeed although the general idea of restrictive norms has emerged from the first round, a more in-dept analysis was necessary for the fine-tuning of each norm with its control points.

### A. The definition of the rules of the game

In line with the results of the first round, nobody from Constanza, Juncalito or the low part of municipality of Jarabacoa were invited. Many persons from the delimited area were invited (either member

of the Cluster or not). The organization of the discussion and the decision was very simple: only one plenary session with all the invited stakeholders. Like for the first round, the Team was charged by the Cluster to make proposals regarding the productive norms and the classification. For the classification, the Team proposed a very classic way to classify green coffee beans (by size, number of defect, colour, humidity rate, and some cup attributes). Its main characteristic was to put very strict criteria for the highest level category, the AAA. The proposed production norms were elaborated by the Team as a mix of some norms from different certification schemes general (Eurep-GAP, *norms of the International Labour Organization*) or specific to the coffee sector (Fair Trade, Utz Kapeh, Bird Friendly, Starbucks, *GI Café de Veracruz...*). Their main characteristic is that *they are very restrictive on all the aspects of the process that main affect quality*. Their main originality is that *they include social and environmental norms* (what is very new for GIs). Those norms (introduced “to differentiate more the product”) were based on the check of many certifications but mainly inspired by EurepGap. They have not been adapted to the specificities of the social and environmental situation of the Jarabacoa region. In order to allow a discussion of the norms (and of their importance level), the Cluster commissioned a field survey the aim of which was to check how far current practices followed by farmers complied with the norms. The results of this study (based on the declarations of 192 farmers) were presented during the second round *in a very optimistic perspective*. For the most crucial control points (related to the fertilization, percentage of red cherries and time between harvest and despulping), the rates of compliance reported by the survey were respectively of 61%, 96%, and 76%. But a more in-depth analysis of few case studies (where the declared practices were verified) showed that none of the six producers complied with those crucial control points. The fact is that producers are often ashamed to say that they do not respect the recommendations for quality...

### B. The game played and its results

The stakeholders who participated were 17 producers of all types of the Jarabacoa region, the

<sup>2</sup> It was not so clear for everybody. The president of the Cluster told us in June 2007 that he does not know neither if the decision has been taken nor what was the decision.

director of the biggest coffee firm of the Jarabacoa region and many public institutions. At the beginning of the second round, the PROCA2-IDIAF team presented the proposal of quality classification, the proposed norms, and the results of the field survey about their level of compliance. Then, the proposed *classification* was discussed, but few people had something to say on a so technical theme. The biggest coffee firm argued for less strict criteria for each category and he succeeded (especially regarding the requirements on bean size). Then, the *proposed production norms* were checked one by the one. However, it was very difficult for producers to defend less restrictive norms in front of IDIAF and CODOCAFE (who for many years were trying to convince the producers to apply those norms) and in front of the biggest coffee firm of the Jarabacoa region (who buy a great part of their coffee). Producers would have been ashamed to oppose to quality norms. Nobody dared to contest the data of the field survey. Nobody dared to speak about this crucial dimension of the problem forgotten in the field survey: the costs of the norms. The unique person who could oppose to the restrictive norms was the president of the Cluster but he was convinced that restrictive norms are necessary for quality and also that everyone can adapt to the norms if the prices are high. The main result of the round was the decision to adopt more restrictive norms than those proposed by the Team. Indeed, the minimum percent of red cherries passed from 95% to 97% and the maximum time between harvest and despulping passed from 12 hours to 8 hours.

## VII. DISCUSSION

### A. The results of the process: effectiveness and fairness questioned

The constitution of a collective property right over a collective resource (as it is the geographical name) is a process that modifies the individual positions over this resource. Many different stages of the local supply chain are involved in this process, and many different typologies of actors inside each stage.

As a consequence, the evaluation of the outcome of this process must consider the specific point of view that is at the basis of the evaluation itself. In the case

of an evaluation from the point of view of the collective interest, the principles that orient this evaluation should be made transparent [13].

If we assume an evaluation perspective of the GI as decommodification tool, oriented by the whole economic performance of the coffee system (and not only of some specific sector or actor) and to social sustainability (that is, giving attention to distributive aspects), the result of the collective decision-making process in Jarabacoa can be viewed as ineffective and unfair. It is *ineffective* in decommodifying coffee because the process of the GI recognition were not inserted in a collective and whole strategy for adding value to the product and generate an aggregate surplus for the local coffee system. Given that the coffee of this area does not have an established reputation and it is not imitated on the market, automatic positive effects from a reduction of unfair products cannot be expected. But the GI in this situation could be the basis for a “reputation-building” strategy [14].

Basically the process of GI Pico Duarte coffee could manage two different strategic variables, that is the volume of production (low and high) and the product territorial identity (low and high). As a consequence, four different strategic options can be envisaged (see table 2).

Table 2: Strategic options in the GI definition process

|                      |       | Product territorial identity   |  |
|----------------------|-------|--------------------------------|--|
|                      |       | Low                            | High   |
| Volume of production | Large | D<br>Mass quality market       | A<br>Niche intermediate market (traders, roasters)                             |
|                      |       | C<br>GI as standard substitute | B<br>Niche final consumer markets (also by means of Alternative food networks) |
|                      | Small |                                |  |
|                      |       |                                |  |

High territorial identity allows for an origin-based differentiation, both on niche intermediate markets (traders and roasters, also in importing countries) if the quantities are large (A-strategy), and on niche final consumer markets (also through alternative food networks both environmentally or socially-inspired, often supported by NGOs) if the quantities are small (B-strategy).

Even with a low territorial identity a coherent strategy can be set-up, by means of promotion activities (D-strategy). Promotion implies some

relevant fixed costs that shall be recovered thanks to high volumes.

The design process of the Pico Duarte Code of practice outlined rather a C-type strategy, that is small volume (due to the strict territorial and altitude delimitations) and a low identity in terms of the link with the area of origin in its physical and especially anthropic dimensions (no reflection was made on the link between the product and the local culture and people), even if with reference to standardised quality criteria.

Without economies of scale, as in the case of the C-strategy, it will not be possible to sufficiently develop the required promotion activities. The GI Code of practice can act as a reference standard for coffee growers and for other local actors, allowing for a reduction of costs associated to transactions both inside and outside the Jarabacoa local production system.

As a consequence, the ability of the C-strategy in generating economic surplus is questioned: expected quantities are small, the increase in price is uncertain (the increased intrinsic quality could be not easy to communicate to purchasers, due to low quantity that may undermine promotion), the increase in costs is high (due to the restrictive production norms and to the few economies of scale on administration, control and promotion).

The result of the process can also be judged as *unfair* according to the criteria of justice proposed by John Rawls [11].

Indeed, the code of practices of the GI excludes producers who are similar to included producers in violation of the “fair equality of opportunity” principle. Indeed, the producers from Juncalito and Constanza - the neighbouring regions - have the same potential for quality (as demonstrated in IDIAF’s study) and the same legitimacy to use the name “Pico Duarte” ). Indeed, nobody was using formerly the name Pico Duarte in coffee commercial transactions. In addition, “Pico Duarte” is not an exclusive geographical reference for the Jarabacoa province, but it is relevant to all the north slope of the Cordillera Central (including Juncalito and Constanza).

Moreover, the code of practices of the GI also excludes the poorest producers (localized below 700 m), which violates the “difference principle” which

stipulates that inequalities are fair only if they are “of the greatest benefit to the least-advantaged members of society” [11, , p.303].

In addition, vertical distribution of the benefits doesn’t seem altered with regard to the previous situation, where big coffee producers and local processors are the powerful actors. Indeed, GI plays the role of internal standard instead of opening new market opportunities to smaller producers, and its contribution in increasing competition in the local green coffee market should be questioned.

This critical assessment of the results of the decision-making process leads us to question what determined this result.

### *B. The key factors in the process*

Many factors explain the final decision on the Pico Duarte coffee Code of practice.

The most important factor is *the role of external actors and the strength of exogenous logics* in the process of GI definition. During the first round of the debate on the Code of practices, all groups (producers, traders, and institutions) chose restrictive options for production norms and for the minimum level of altitude. This unanimity can be explained by the influence of the Team’s presentation which put the accent on quality. Although, the aim of the Team was to defend the large option (with Juncalito and Constanza), maybe it had also the unintentional effect to give arguments in favour of the exclusion of the farms below 700-800 m (unable to produce fruity coffees) and in favour of strong production norms. All the more that, according to the data given by the Team, the exclusion of the farms below 700-800 m would not have affected significantly the quantities and the economies of scale (second argument stressed by the Team to favour the large option). As a matter of fact, the data showed that this exclusion would imply the reduction of only 21% of producers and 6% of the coffee area (see table 1).

The strong weight of such scientific data on coffee quality can itself be explained by the fantastic accumulation of knowledge aggregated in scientific instruments (like soil maps, GPS), categories (like the definition of what is a coffee producer), procedures (like recommendations on good practices for coffee cultivation and processing), and norms (like ISO

norms which specify how to realize the cup tasting). As data from all over the world were centralized and accumulated in those instruments, procedures, and norms, we can speak of “action at a distance” [15]. For this reason, we can say the cognitive framework in which the decision making-process was embedded was coming from abroad. Maybe for the same reason, the consultant who performed the field survey on real practices was not able to see the gap between them and the recommendations of the coffee manuals and presented biased data during the second round. Note that this external influence on the cognitive framework of design process is not specific to the case of the GI Pico Duarte: it always happens when scientific instruments, procedures, and norms are used.

So, the idea that the codes of practices of the GIs are locally designed should be questioned even when neither external cooperation agencies nor external researchers are involved in the process. Moreover, this external cognitive influence may also impede the design of a specific code of practices. We saw in the case of GI Pico Duarte that all production norms (included the social and environmental ones) were copied from others certifications without adaptation to local specificities (the same thing is true for the classification norms). The result is a very classical and generic code of practice, which does not incorporate elements of local culture and knowledge. The relevance of such generic GIs to “decommodify” the coffee market is doubtful.

A second explication factor is the *empowerment unbalances between local actors*. The concentration of power in the hands of the big trader operating in the area influenced the decision process in many ways, both in the definition of set of actors participating in the process (exclusion of traders of neighbour areas of Juncalito and Constanza) and in the contents of the Code of practices. In the case of the decision to exclude the zones of Juncalito and Constanza, the biggest trader opposed to the inclusion in order to avoid the competition of others traders (as it will be the case in every local coffee supply chain), whereas scientific data supported the inclusion.

Empowerment was relevant also inside the coffee growers. Information on GI and on its potential function was not spread among all producers, as not very clear was the role of the Code of practices. In

particular, small coffee growers farmers located in lower areas, and coffee growers of Juncalito and Constanza areas, were not well informed.

Even the lack of time during the decision process (e.g. during the first round to have a collective debate based on the work of the different groups) can be explained on the basis of the power of some actors in establishing the rules for discussion and taking a decision.

A third factor is the weakness of *local institutional framework*. Local public institutions were out of the GI process, and they didn't put in the debate their point of view, that ought to be inspired by public interest.

Other elements seem to be more *contingent* to this specific case study and can not be easily generalised. For instance, the sequentially of the decision-making process played an important role in the decision to exclude the lower areas. Indeed, the discussion of the delimitation of the GI area occurred during the first round *before* the discussion about the classification of green coffee. But with this classification, it would have been possible to include the low areas in the GI without blending their coffee with the aromatic coffee of the high altitude areas.

Other contingent factors played a decisive role in the success of the more restrictive option. The main one is the previous existence of the Cluster (with a legitimate area of intervention restricted to the municipality of Jarabacoa) at the moment of the birth of the GI initiative. This played a decisive role in the participation of producers from Constanza and Juncalito to the first round. Indeed, the current name of GI at that time was *Café de Jarabacoa* what is not very attractive for people of the neighbouring zones (the coffee production is more recent and less reputed in Jarabacoa).

In brief, although GIs have a potential impact on the “decommodification” of the coffee market, this impact may be undermined by some external cognitive influences (mainly driven by instruments, categories and norms) that can lead to a Code of practices too specific and not adapted to real characteristics of the local production system, and by lack of empowerment inside the local production system. Besides, the exclusive focus on high quality issues and the complete lacking of attention to the governance of the

future GI system (including collective management issues, possible elaboration of collective commercial strategies, control of the compliance of the product with the Code of practices) can threaten seriously the future performance of the GI Pico Duarte.

## VIII. CONCLUDING REMARKS

Geographical indications can give important contributions to the decommodification of the coffee market.

First, GIs can stimulate the developing of the product specificities related to the territorial origin of the product (*terroir*). Coffee produced in Jarabacoa region had not a reputation of high-quality on the market nor a production tradition, having been recently introduced, but technical analysis evidenced a high quality “potential” . In this context GI is not a matter of defending a previously acquired reputation from abuses. Rather, it is a process of reputation-building pursued by reaching a quality standard fixed locally but according to market requirements. All the decisions taken on the Code of practices, and the justification brought on for that, refer to a qualification project of coffee production in the area. That is why, rather than preserving traditional techniques and know-how, the rules have rather the aim of *changing* traditional production practices in order to improve coffee quality and meet commercial standards.

The GI application procedure should become a collective learning process, where local actors take consciousness of the potential qualities and specificities of their product, but also of possible improvements in their production practices.

The meaning of the GI can be quite different from the European (Mediterranean) one which puts much emphasis on the *terroir* effect as quality differentiation, and more inspired by a “standard quality” approach, where GI aims at reaching a homogeneous and high level of quality on the market but with less attention to the human, historical, and cultural specificities of coffee quality of the area. The same logic of the Pico Duarte case is observable in many other GI initiatives on coffees, in Dominican Republic and in other producing countries.

In the coffee global chain GIs can be conceived as a way of decommodification which acts by guaranteeing

buyers and/or roasters both the origin of the coffee and its quality and production process, thus reassuring a supply of raw material with some stable characteristics along time, limiting the need to reformulate their blends [16] and reducing the cost of quality controls. This can help building a trust-based relationship [17]. In this sense, a GI may act as “quality stabilizer” to simplify the supply decisions of the roasters and their blending process [18].

The fact that GI can be used to promoting and protecting quality more than *tipicity* can deeply influence the GI recognition criteria: less reference to tradition and on the effects of *terroir* on product characteristics, more reference to technical evaluation of quality and standards. One possible interpretation for this special vision relies in the fact that actually the very concept of GI has been recently introduced in many countries as Dominican Republic and many people do not know the meaning of it, and maybe interpret it as a quality certification scheme as many others, without attaching special values.

The decommodification potential of GIs can be lowered if the GI is exclusively devoted to technical specificities and intrinsic quality characteristics. In fact, this approach can lead to serious distortions in the definition of the GI product, threatening the effectiveness of the GI tool. The logic of “reputation-building strategy based on quality increase” has huge consequences on the way the GI will operate, on exclusion effects, on marketing initiatives. In general, small GIs face serious difficulties to satisfy the requests of the downstream actors for logistic reasons (for example, the standard unit for exporting coffee is the container).

The characteristics of global commodity supply chains, and in particular the disarticulation of production process between producing and consuming countries, can block the development of GI initiatives on green coffee aiming at reaching the final consumer. Roasters use blends of coffees to produce a product with stable characteristics, and they perceive GIs as a menace for their business. As a consequence, a GI coffee may face many problems to reach the final consumers as “pure origin”. To date reference is very often made by roasters to countries of origin or estates, or sometimes to imaginary *terroirs*, thus preserving a great deal of room for manoeuvre [10].

It is clear that GI projects aiming at reaching the end of the supply chain (roasters, wholesalers, final consumers) should consider together quality issues and distributive issues, building not only a “new” identity of the product but also new ways of linking the product with buyers (alternative networks). In this context, the empowerment of local actors is an important point.

If we consider the distribution of (potential) benefits coming from the decommodification (fairness implications), it is important to consider GI as a collective process aiming at establishing property rights on a collective name by a rules codification process, transforming the *status quo* situation. Possible conflicts between different logics of the involved actors inside the local GI production system may arise. GI can be seen both as a quality standard (for local processors and traders), or as a marketing tool useful to opening new marketing channels and escaping from local buyers (for local producers and their associations) [19].

Very strict norms on the production and processing process reduce the number of producers who will be able to comply with the norms without too high costs. Such a “high-quality” GI may be utilized and useful only for the bigger farms and the only processor in the area, acting as a “club” network with high entry fees.

In fact, many doubts on smallholders’ capacity to comply with the Code of practices and, more in general, to interface their firms with bureaucratic burdens (e.g. traceability) emerge. In particular, smallholders may encounter stronger adaptation problems to GI norms and logic, and hence they cannot join it. In addition, very often along the supply chain there are strong power unbalances that impede smallholders to make use of the GI (e.g. credit anticipations by buyers not interested in GI that oblige farmers to sell them the product) or to gain the right price. Horizontal (between firms at the same stage of the supply chain) and vertical (between firms belonging to different stages of the supply chain, e.g. agriculture and processing) distribution of benefits GI can generate is a very important point also for social and environmental sustainability.

The trade-off between high-quality and social inclusion seems to be impossible to cope with, at least at the beginning of the valorisation process. In this

direction, if quality is the sole way to follow for competing in the market, actions to raise both the empowerment and the resources (human, financial, technical) of local coffee producers should be activated.

Therefore, the development of all the decommodification potential of GI initiatives at local level asks for a strong coordination with other policies aiming at empowering disadvantaged local actors, making easy or possible their access to new forms of product valorisation and new income opportunities. A coordinated policy at territorial level is a key point for their real participation to the building process of the GI (education, information ...) and for the effectiveness of the GI (information, credit, technical assistance, access to markets). An important step will be the aggregation of small producer in cooperatives and/or associations, to increase their bargaining power.

Normally, GI alone cannot provide the solution for the product valorisation, in particular when the problem to solve is not only the protection from unfair imitations. The GI should be integrated in a more comprehensive strategy elaborated by local actors in order to valorise the product and local resources involved in its production process. In this sense GI cannot be only a quality scheme, but also a new governance tool for localised production systems.

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## REFERENCES

1. Daviron B, Ponte S (2005) *The coffee paradox: commodity trade and the elusive promise of development*. Zed Books, London.
2. Daviron B (2002) *Small Farm Production and the Standardization of Tropical Products*. *Journal of Agrarian Change* 2(2): 162-184.
3. Giovannucci D, Jan Koekoek F (2003) *The state of sustainable coffee: a study of twelve major markets*. International Coffee Organisation, International Institute for Sustainable development and UNCTAD
4. Lewin, B, Giovannucci D, Varangis P (2004) *Coffee markets: new paradigms in Global Supply and Demand*. World Bank, Agriculture and Rural Development Discussion Paper, 3.
5. Kaplinsky R, Fitter R (2004), *Technology and globalisation: who gains when commodities are de-commodified?*. *International Journal of Technology and Globalisation*, 1(1): 5-28
6. Belletti G (2000), *Origin labeled products, reputation and heterogeneity of firms*. In: Sylvander, B., Barjolle, D., Arfini, F. (Eds.), *The Socioeconomics of Origin Labeled Products in Agro-food Supply Chains: Spatial, Institutional and Co-ordination Aspects*. INRA, France
7. Marescotti A (2003) *Typical products and rural development: who benefits from PDO/PGI recognition?* EAAE Proc. of the 83rd Seminar of the European Association of Agricultural Economists: *Food Quality Products in the Advent of the 21st Century: Production, Demand and Public Policy* (Chania, Greece)
8. Montagnon C (ed.) (2006) *Coffee: terroirs and qualities*. Editions Quae, Versailles Cedex
9. Teuber R (2007) *Geographical Indications of Origin as a Tool of Product Differentiation: The case of coffee*. EAAE Proc. of the 105<sup>th</sup> Seminar of the European Association of Agricultural Economists (Bologna, Italy): *International marketing and international trade of quality food products*
10. Neilson J (2007) *Institutions, the governance of quality and on-farm value retention for Indonesian specialty coffee*, *Singapore Journal of Tropical Geography*, 28 : 188–204
11. Rawls J. (1971) *A Theory of Justice*. Harvard, Harvard University Press
12. Moquet H, Poncet E (2006) *Dynamiques en jeu dans la construction d'une Indication Géographique. Etude de cas du café de Jarabacoa République Dominicaine*, Mémoire présenté en vue de l'obtention du Diplôme d'Ingenieur en Agronomie Tropicale, CNEARC-CODOCAFE
13. Belletti G., Hauwuy A., Marescotti A., Paus M. (2005), "Evaluation des effets locaux des AOP-IGP: développement rural, organisations sociales et vie des territoires", Colloque international "Produits d'origine: enjeux et acquis scientifiques", INRA-INAO, Paris, 17-18/11/2005
14. Pacciani A, Belletti G, Marescotti A, Scaramuzzi S (2001) *The role of typical products in fostering rural development and the effects of Regulation (EEC) 2081/92*. EAAE Proc. of the 73rd Seminar of the European Association of Agricultural Economists (Ancona, Italy): *Policy Experiences with Rural Development in a Diversified Europe*.
15. Latour B (1989) *La science en action: introduction à la sociologie des sciences*, La Découverte, Paris.
16. Galland JC, Avelino J, Larrain A, Montagnon C (2006) *Origin coffees: are Appellations of Origin on the horizon?*, in: Montagnon C. (Ed.) *Coffee: Terroirs and qualities*, CIRAD. Editions Quae, Versailles: 49-68
17. Gerz A, Avelino J (2006), *Costa Rican Arabica Coffee: Legitimacy for specialty*, in: Van de Kop P, Sautier D, Gerz A (Eds) *Origin-based Products. Lessons for pro-poor market development*, Royal Tropical Institute and Cirad
18. Avelino J, Roman D, Romero S, Fonseca C (2006) *Indicaciones Geograficas y Denominaciones de Origen: Algunos Fundamentos y Metodologias con ejemplos de Costa Rica sobre café*, ICAFE, Costa Rica
19. Tregear A, Arfini F, Belletti G, Marescotti A (2007) *Regional foods and rural development: the role of product qualification*. *Journal of Rural studies* 23:12-22

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