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The Florida oranges local agro-food system – Geographical Indication or Commodity?

Perret A.O. [1] and Thévenod-Mottet E. [2]

[1] AGRIDEA, Lausanne, Switzerland
[2] Laboratoire d'Études Rurales – LER, Lyon, France

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[1] AGRIDEA, Lausanne, Switzerland
[2] Laboratoire d'Études Rurales – LER, Lyon, France

Abstract— **When considering the Florida oranges as a local production system, two questions currently arise: is this system frightened by a globalization of the orange juice as a commodity whereas it is integrated to a globalized system? And is there any specific local asset remaining, such as a special quality and reputation which would justify a recognition as a geographical indication? Our findings demonstrate that there is a dilemma, for the State authorities as well as for some actors of the system, between an origin product approach and a sectorial commodity one.**

Keywords— **Geographical indications, commodity, globalization.**

I. INTRODUCTION

According to its definition in the TRIPS Agreement of the WTO, a Geographical Indication (GI) is used to designate a product that has a special quality or reputation attached to its geographical origin. At a first glance, Florida orange seems to fit this definition, the image of the State of Florida being traditionally associated with the citrus. Indeed, orange production has a long history in Florida thanks to its well adapted natural environment and climatic conditions.

In the first part of this paper, we describe and analyze the Florida oranges supply-chain, which is characterized by the importance of related public policies since decades. Our purpose is to assess the "GI potential" of Florida orange. The result of this assessment is contrasted, considering the real use of the geographical designation on the market and the integration of the Floridian citrus sector in globalized flows.

The legal issues of the protection of GIs are then addressed in a second part. The interest and legitimacy of protecting GIs through specific legal tools and institutional frameworks are hardly disputed internationally. The USA is amongst the stronger opponents to an enhancement of the international protection of GIs, and claim that the trademark system is appropriate for GIs as well. As the USA officially considers "Florida oranges" as a GI, it is worth understanding how such an important potential GI system can be protected and supported in the framework of the US doctrine on GIs. This case may be a good example of the evolution of a GI system in a context which does not provide a very specific legal and institutional framework for GIs, unlike in Europe. Due to the interrelationship with the Brazilian orange sector, our case is a particularly appropriate illustration of the complex boundaries between localized and globalized agro-food systems.

II. FLORIDA ORANGES: A GI SYSTEM?

A. The Florida orange industry

Orange production has a long history in Florida and the reputation of Florida oranges goes back to the beginning of the 20th century. The first trees were planted in Florida in the mid-1500s, probably by early Spanish explorers near St. Augustin. At that time, there were sour and bitter oranges like the ones grown in Spain. Florida's well drained sandy soils, abundant sunshine and rain, humidity and temperature were perfect for orange trees, and they developed in wild groves in particular in Orange County [1]. The first commercial orange groves were planted in the 1700s in north Florida, but at that time it was sour orange. Later, a gradual shift down south during the 19th and 20th century to escape the severe freezes was associated to the spreading of sweet oranges, with several varieties created and developed in Florida, e. g. Parson Brown orange [2]. Nowadays, thousands of acres of orange groves are grown in the Florida peninsula south of the Suwannee River. It has become a huge industry and thus contributes substantially to

the state economy. For the 2005-06 season, the on-tree value of orange production in Florida was $880 million dollars [3] and it is estimated that in total the growing, packing, processing, and selling of citrus generate $8.9 billion per year. In addition, the citrus industry creates approximately 76000 jobs in Florida [4].Florida is the citrus territory by excellence, the food production system being also enlarged to other activities such as tourism and non-food products, e. g. Florida Chemical (fig. 1), a firm founded in 1942 which develops solvents, flavors and fragrances from citrus essential oils.

Fig. 1: Florida Chemical Company, Inc. logo
Source: Florida Chemical website

Florida oranges started to become well know across the country in the 1920s and 1930s, when Florida became a popular winter vacation destination for tourists from the northern States, who would bring back oranges from their travels. As regards to the reputation of Florida for citrus, the Indian River region is also very well-known since the 1930s for Grapefruit. It represents now 75% of the Florida grapefruit production, and the Indian River Citrus League has developed its own certification mark. It is worth noting that, in this collective initiative of qualification for Floridian citrus, the only explicit reference to Florida is a map showing where the Indian River district is located (fig. 2).

Fig. 2 Indian River Citrus certification mark
Source: Indian River Citrus League website

In the 1940s, with the beginning of the technology to concentrate juice into a frozen storable product, orange juice consumption got very popular [5]. Even American soldiers fighting in World War 2 got supplied with orange juice from Florida. Today, the consumption of orange juice in the USA is the higher in the world with a per capita consumption of more than 15 liters a year in 2008-09 (compared to the maximum of 22 liters reached in 1997-98) [4]. It has indeed a very strong health image and is estimated to make up nearly 20 percent of Americans' total fruit servings [6].

Florida oranges are ideal for the production of orange juice. They are thought to be juicier than oranges produced in California and in other countries but less good-looking. The juice is also considered to be sweeter and more consistent than in other oranges. These common characteristics of Florida oranges may be more related to the State's growing conditions than to the varieties used. Indeed, the primary varieties in Florida are Navel, Hamlin, Pineapple, Ambersweet and Valencia and have been selected for their different ripening periods in order to have an extended season. Also, the State regulation related to the varieties of oranges grown in Florida is very supple in that respect as the Florida Citrus Code [7] (in art. 601.03) merely defines "Oranges" as "the fruit of *Citrus sinensis Osbeck*, commonly called sweet oranges".

The Florida orange industry is regulated by the Florida Department of Citrus (FDOC), established in 1968 as the administrative arm of the Florida Citrus Commission created in 1935. The Commission has a 12-member board made up of owners of citrus groves, processors and packers, appointed by the Governor of Florida and confirmed by the Senate for three-year terms. According to the Florida Citrus Code (art. 601.01 and 601.02), its task is to "protect and enhance the quality and reputation of Florida citrus fruit and processed citrus products in both domestic and foreign markets. Its mission is sevenfold:

- Protect health and welfare and to stabilize and protect the citrus industry of the state;
- Defend Florida's vast public interest for the citrus business;
- Protect and enhance the quality and reputation of Florida citrus fruit and the canned and concentrated products;

- Secure its efficient inspection and classification at reasonable costs;
- Enable citrus producers collectively to pay assessments to fund marketing and research programs;
- Stabilize the Florida citrus industry and protect the public against fraud, deception, and financial loss;
- Promote the general welfare of the Florida citrus industry, which in turn will promote the general welfare and social and political economy of the state.

The FDOC is financed by a tax that owners of citrus groves pay for every box of citrus fruit sold. Since 1970, the State of Florida has imposed, pursuant to Section 601.155 of the Citrus Code, an "equalizing excise tax" on processed orange and grapefruit products that are imported into the state to be blended with Florida juices, in order to make importers contribute to the FDOC marketing activities. Brazilian exporters pay the Florida excise tax in addition to the US import duty. Furthermore, since 1987 an antidumping duty order affects the import of Brazilian frozen concentrated orange juice (FCOJ). The total of taxes and duties accounts for nearly 50% of the value of the Brazilian FCOJ. As the citrus products from other states of the USA are not submitted to the equalizing excise tax, Brazil requested consultations at the WTO in 2002, arguing that this tax was infringing WTO provisions. Brazil and the USA reached an agreement on this issue, as Florida imposed the same excise tax on products from other states of the USA, in addition to the fact that the FDOC tax was strongly reduced for Brazilian importers not willing to participate to the FDOC advertising campaigns. According to some authors [8], the equalizing excise tax plays an important role to increase the orange juice demand through advertising and, thus, to increase the industry revenues. Other authors conclude that, even if this tax is still likely to infringe obligations deriving from the WTO agreement, such a system benefits to Brazilian exporters as well as to Floridian producers, and this may explain why the former did not fight against it since 2002 [9].

More than 80% of the FDOC budget of approximately $58 million dollars is spent on advertising and promotional campaigns for Florida citrus, particularly Florida orange juice, 10% for scientific research and the remaining 10% for regulatory functions [10].

During the 2008-2009 growing season, 6,625,920 tons of oranges were produced in Florida. The highest production ever of Florida oranges was reached in the 1997-98 season, with 9,955,200 tons [4].

The impacts of hurricanes and freezes may cause important losses of production, like in 1991-92 and in 2006-07. Nevertheless, in 2008 the Florida orange production still represented more than 75% of the United States and more than 10% of the world orange production [4]. But the relative importance of Florida is continuously decreasing, as the Florida orange production used to represent more than 20% of the world production during the 1960s and 1970s. Hence Florida produces 28% of the world supply of orange juice in 2008-09 (61% for Brazil), because the large majority or Florida oranges are processed into juice. But the Floridian industry is now based on a dominance of blended orange juice production (blend of Brazilian and Florida orange juice concentrates). Indeed, only about 20% of the total Florida orange juice production is 100% (non-blended) Florida orange juice.

The Florida orange industry is comprised of four main groups: the orange growers, the orange packers, the juice processors and the harvesters.

Orange growers

The Florida orange growers can be described more as investors than as farmers. They commonly do not live on the grove but in the north of the USA or in other countries and they do not work in them either. Caretaking companies or "grove managers" are hired to do the work required to maintain the groves.

Hard data on the exact number of Florida orange growers are not available. According the chairman of Citrus World, there are 11,000 to 12,000 citrus growers in Florida with 9,000 to 10,000 of these being orange growers (Davis in [11]). The level of concentration in the citrus industry is very high, as 80% of the citrus land in Florida is owned by 20% of the growers. Those are large growers who own more than 1000 acres of groves, like King Ranch/Consolidated Citrus L.P. with 50,000 acres of

groves or US Sugar Corporation with 25,000 to 30,000 acres of groves (Griffiths in [11]). When speaking specifically of the orange industry, the figures are probably even higher as it is more concentrated than the grapefruit industry.

The total acreage planted with oranges in the 2005-2006 growing season was 491,000 acres, almost 80% of the total citrus area in Florida. This was down from a peak of 624,900 acres the 1996-97 growing season, when prices were high. The acreage planted with oranges in Florida can be characterized as having had two peaks: one peak in the 1970s, followed by a series of freezes in the 1980s that destroyed large proportions of the groves; and one peak in the 1990s, after growers and new supply chain actors had replanted further south and when prices were high. In the last few years, orange acreage (and citrus acreage more generally) has decreased, due to hurricane damage, canker, and urban development pressure, but might go back up again when prices are high.

Citrus fruit packers

Less than 5% of Florida oranges are sold fresh to fruit packers [4]. Fruit packers pay a better price for oranges than juice processors (at least, twice more) but the fruit must meet higher standards, in particular for their appearance. According to the Florida Citrus Mutual, approximately 50 citrus packing houses have operated in Florida in recent years. M. Kinney from the Florida Citrus Packers Association estimates that per year about 35 million cartons of citrus are packed with grapefruit (60%), oranges (20%) and tangerines (20%). During the 2008-09 growing season, out of 11 million cartons of oranges and temples, 10 million were sold on the domestic market and 0.6 million were shipped to Canada [4] [12], the main other export markets being Taiwan, the Netherlands and France.

Orange processors

The remaining 95% of Florida oranges are sold to processing companies to be processed into:

- Chilled un-concentrated juice, pasteurized and packed in cartons (62%). This juice is made almost exclusively with domestically grown oranges;
- Frozen concentrated juice, packed in small cans for retail or in bulk for wholesale (37%).This juice is produced with a blend of concentrates from domestic and foreign sources including Brazil;
- Other types of processing, such as making by-products (1%).

Processing companies buy the oranges either directly from large orange growers or from “bird doggers” (intermediaries that collect the fruit from many smaller growers). They also buy from cooperatives of small and medium-sized growers. The contracts offered by the processing companies are either short-term (“cash”) or long-term. The long-term contract gives a guaranteed price and a guaranteed market; the short-term contract is riskier, but potentially more lucrative during periods of shortage.

There are 7 major processing plants in Florida (Edwards in [11]), the largest being Tropicana and Minute Maid. Citrus World is the only grower cooperative. Its brand and operating name is Florida’s Natural Growers, the third largest orange juice brand sold in the US (after Minute Maid and Tropicana). Citrus World is the marketing cooperative for twelve grower’s cooperatives (Davis in [11]). Their primary brand “Florida’s Natural” accounts for approximately 2/3 of their sales. All juice sold under the Florida’s Natural brand is 100% Florida juice. Citrus world is the only major company that produces 100% Florida orange juice.

From this processing capacity, 50-60% is nowadays Brazilian-owned. Brazilian firms started buying out Florida processor in the1990s. They had built strong ties with retailers and re-processors (who buy bulk juice and market it under their own label) during the freezes of the 1980s, when the US supply of oranges was limited. When the supply of oranges returned in the early 1990s, rather than trying to compete directly with US processors, the Brazilians saw it as an opportunity to enter and have operations in Florida. The Florida processors were more fragmented, and were weakened by the relatively low prices of the early 1990s, and the Brazilian processors, who were more concentrated and more powerful, were able to buy them out. Procter and Gamble sold their orange processing plant to Cargill in 1992 and Minute Maid sold their plants to Cutrale, the biggest processor in

the world, in 1996. Brazil is now Florida's major competitor in orange juice production. Together, Brazil and the US account for 90% of the world's orange juice, with Brazil producing about 60% and Florida producing about 30%. Even if there is a shortage of USA orange fruit for juice and if there are consequently imports from Brazil, the USA remain an important exporter of orange juice (almost all from Florida), mainly to Canada and Europe.

Harvesters

Almost all of Florida's citrus fruit is handpicked. Harvesters are seasonal workers, with the immense majority (more than 90%, according to several informants) being undocumented. Most of these workers are Mexican immigrants.

A report on the labor requirements for Florida citrus explains that, "Harvesters comb lower tree branches and scale ladders to heights of 18 feet to pick individual pieces of mature fruit. Workers collect the fruit into shoulder bags and fill large field tubs… Specially designed tractors mechanically transfer fruit from the field tubs to truck trailers waiting at the edge of the field". Workers are paid according to a piece rate; therefore, a worker's wage depends on his productivity. Informants told us that today, the average worker makes $9 per hour, and a good worker can expect to make $100 per day. Most citrus workers are hired on a day-to-day business; consequently, they only earn income when they have access to the groves. Within the industry, a labor contracting system has evolved to manage and supply harvesters [13]. The contractor provides the grove owner with harvest labor for the required period, and provides field supervision and handles some of the accounting and paperwork associated with hiring seasonal farm workers.

Labor shortage and labor costs are two big issues in the industry. Indeed, workers prefer jobs in manufacturing which often pay better and are available on a year-round basis. The supply of labour also varies according to the political climate as most harvesters are undocumented workers. To stabilize the situation, growers are lobbying for an improved, more cost-effective guest worker program than the current H2A program. The labor cost issue is linked to Florida's major competitor, Brazil. The former Director of the FDOC, Dan Gunter, said that they estimated that their harvesting costs in Florida were three or four times what they are in Brazil (Gunter in [11]). In order to be able to better compete with Brazil, growers have invested $30 million in research to develop mechanical harvesting capacity. Techniques include equipment to harvest the citrus fruit by shaking the trees (but high costs, potential damage to the tree and fruit) and an "abscission agent" to chemically "loosen" the ripe fruit from the tree, so that they could be removed with only gentle shaking by a mechanical harvester (Roka in [11]). However, many supply chain actors think that it will be a long time before either of these technologies will be developed to the point that they could be effectively implemented in the industry.

B. Has Florida oranges a future as a GI?

The entire industry—from the growers to the processors to the retailers—is becoming more concentrated. On the growers' side, the concentration can be explained by the fact that "it takes more and more land to support a grower". The pressures facing growers in recent years were identified as: development pressure as land prices in Florida have increased dramatically since 2003 (Morris in [11]); citrus canker, which has been an issue since 1995; hurricanes and difficulty finding workers to harvest the fruit. Larger growers are better able to respond to and ride out a "bad year," whereas smaller growers, which aren't getting sufficient support from the government, are more likely to be pushed out of business by these pressures or to opt to sell their land to developers, given the risks associated with the citrus industry and the high land prices. Furthermore, in recent years, there has been a move towards corporate ownership of the groves (i.e., US Sugar, Alico), whereas in the past, groves were primarily owned by individuals or families. On the processor side, there were thirty to forty processing plants in Florida before 1990. The biggest four firms accounted for only about 40% of processing capacity in Florida (Morris in [11]). Today, the processing sector in Florida has contracted to having only 7 major processing plants (Edwards in [11]). One grower stated that one of the biggest changes that has taken place in the citrus industry is the "demise of the middle class;" now it is the big processors who control production—"they're not even

Florida guys anymore" (Todd in [11]). Of the four huge companies that dominate the processing and distribution system in Brazil (Cutrale, Citrosuco, Citravia, and Louis Dreyfus), three have operations in Florida (Davis in [11]).

The competition from these Brazilian Firms, who, as we mentioned above, now control more than 50% of processing capacity in Florida is a major concern within the Florida orange industry, for both growers and processors. The Brazilian industry is even more concentrated than the Florida citrus industry, and has substantially lower labour and regulatory costs. In December 2004, a coalition consisting of Florida Citrus Mutual and a group of Florida-based processors petitioned the US government for antidumping duties to offset the "unfair prices" offered by Brazilian processors on both frozen-concentrated orange juice (FCOJ) and non-from-concentrate (NFC) orange juice [14]. The petition contended that both FCOJ and NFC had been dumped in the US during 2004, at prices below the costs of production. The US International Trade Commission (ITC) and the US Department of Commerce conducted the investigation, and in February 2006 the ITC reached a final determination that Florida orange growers had suffered "material injury" due to dumped Brazilian orange juice [14]. Therefore, the IFC ruled that current antidumping duty deposit on imports of Brazilian FCOJ and NFC juice would remain in place for at least two years.

At the same time, many growers stated that they were concerned that the tariffs applied to Brazilian orange juice imports since the 1930s would be eliminated with the Free Trade Agreement of the Americas and/or within World Trade Organization negotiations (Edwards in [11]). In order to prevent this elimination, which would destroy the market for the Florida growers that built it with great effort (Gunter in [11]) and would leave a monopoly situation for the Brazilians (Davis in [11]), a group of supply chain actors, originally organized by the FDOC and Florida Citrus Mutual, formed the Citrus Tariff Oversight Committee (CTOC) in 2003. But despite the effectiveness of the CTOC in transmitting its message, the international political climate could have potentially devastating effects on the Florida orange industry in the future. Most informants stated that the industry would not be able to survive without the tariffs; and that almost all of the current citrus land would be sold for urban development if they were to be eliminated.

In this context of strong pressures and increasing Brazilian operations in Florida, the role of the FDOC in carrying out collective marketing activities for Florida orange juice was casted doubt on. Indeed, a group of large corporate growers filed a suit against the FDOC in 2002, stating that they should not be forced to pay the tax for collective (generic) marketing campaigns for Florida citrus. One of the big issues was that since 2004 Brazilians do not pay the tax for that advertising, yet benefit from it as their juice is blended with Florida orange juice (Edwards in [11]). However, other supply chain actors felt that the plaintiffs in the case did not have the interests of the region at heart and where only looking after their own benefit (Griffiths in [11]). Indeed, the group has long-term marketing contracts with Tropicana and thus does not need generic marketing (Kahn in [11]). But not all of the largest growers are against the collective marketing campaign; Ben Hill Griffin III, CEO of Ben Hill Griffin Inc., one of the largest growers in the state, but still family-owned, stated that the FDOC was "doing fine" and that he was "against the lawsuit" (Griffin in 11)). Thus, there may be an emerging division, over this issue and others, between corporate owners who have more extra local interests and family-owned companies, who may have more local, regional, or state-oriented interests.

Like the tax for collective marketing, the GI issue has been an internal source of division in the industry for many years. Indeed, according to a grower, since the 1970s, growers have periodically introduced initiatives to distinguish Florida orange juice from Brazilian orange juice (Kahn in [11]). But large growers and processors with interests in both countries were opposed to such efforts, and efforts were never organized; therefore, these initiatives never made any real headway.

In fact, "Florida Oranges" is a classic example of a GI in many ways. First, there is an interprofessional body, the FDOC (as being governed by the Citrus Commission), which engages in marketing campaigns essentially for Florida orange juice and establishes production standards. This type of organization, where growers fund a collective marketing and regulatory

effort, is very unique in the USA. According to interview informants, the FDOC was the first commodity group established in the US for a place-based product, before Washington apples or Vidalia onions and played a central role in making the citrus industry famous (Kahn 2005 in 11)). A former executive director explained, "It goes back to growers, back in the 1920s and 1930s, who were getting low prices for their fruit and were looking for ways to help themselves. After trying various voluntary organizations […], they decided they needed the power of the state to help them and they asked the Florida State legislature to give them the authority to perform the three functions of research, quality control, and marketing... Everybody who deals in citrus, to this day, has to have a license in order to buy and sell fruit... Most of the money that we raise, through a tax on each box of citrus… goes to the marketing program" (Gunter in [11]). A second way in which "Florida oranges" is a classic example of a GI is that it is promoted based on its connection to a particular place. Indeed, Florida is strongly linked to images of orange groves, sunshine, and healthy glasses of orange juice in consumers' minds. Nevertheless, these collective promotional campaigns based on the link to Florida are in fact being used essentially to promote juice that is made from a blend of oranges grown in Florida and Brazil. So the consumer is being mislead and on that point, the Florida orange case deviates from the vast majority of GIs. The reason for that blending as explained above, is the shortage of oranges that occurred in the 1980s in Florida and led orange processors in Florida to buy bulk juice from Brazil to cover the US demand. But by doing this, they "opened the door" for the Brazilian citrus industry to the US market (Evans in [11]).

The GI strategy in that situation could have been to adapt the Citrus Code to take into account the new player in the game and to add new rules about the geographical origin of the oranges used in the juice and setting minimum proportion of Florida oranges required. Moreover, a parallel market for 100% Florida orange juice could have been developed and clearly communicated to the consumers. But the regulation did not change and the initiatives to distinguish 100% Florida orange juice never really took off because of the divided interests in the industry.

Beyond this division, the evolution of the industry towards a commodity product might be linked to a general lack of intimate connection between the growers and the land since they neither live nor work in the groves. One landowner, who had a caretaking company managing his groves, stated, "[The problem is that] growers don't care… I have a friend who just died—a grower. He said, 'The problem is that there are no longer any Florida citrus growers. There are only real estate people [who] are waiting to sell their land.' There is a lot of truth in that" (Bouis in [11]). It may be that the grove managers have the strongest ties to the land but they have very little power within the industry. They do not own land and are not represented in the governing bodies of the industry (e.g., the FDOC and the regional growers' associations).

III. THE SITUATION OF GIs IN THE USA

A. The international position of the USA regarding Geographical Indications

For more than a decade, GIs have been a subject of hard debate in the WTO TRIPS framework. From the beginning, the USA lead the opposition to any increase of protection for GIs, considering that the provisions of the TRIPS Agreement negotiated for the Marrakech Agreement in 1995 are the greatest concessions they could afford in this issue. In the framework of the special session of the WTO TRIPS Council devoted to the establishment of a multilateral register for GIs for wines and spirits, together with a number of non European countries (Australia, Canada, Chile, Argentina, Mexico, etc.), the USA made a proposal which is characterized by non legal effects and voluntary participation of countries to the system. Generally speaking, the aims of such a proposal are to leave the recognition of the protection of GIs to courts' decisions and to limit as much as possible the involvement of the public authorities in these concerns. The USA oppose as well to the claim from numerous WTO members to extend the higher protection granted to wines and spirits to all products, arguing that this higher protection was a specific

concession to European countries and should not become the standard for all GIs [15]. Not very surprisingly, the conflict had also an episode at the WTO Dispute Settlement Body, opposing the USA and the European Union. But, to some extent, it was paradoxical that the USA attacked the EU legislation on PDOs and PGIs as being discriminatory for GIs from third countries, because until now not a single USA GI applied to be registered as a PDO or a PGI in the EU and be protected as such.

This conflict, roughly Old World vs New World, may be interpreted according to three levels. The first level is the one of direct economic interests. Numerous firms in the United States use European geographical names to label their products, considering them as generic names that designate kinds of products (like "Parmesan"). This use is of course grounded on the effects of ancient and recent migrations of Europeans to the New World, where they gave European place names to their settlements (as an example, there are more than 5'000 US cities with Swiss names) and went on producing the same products they used to produce in their home country, according to the same know-how. But many European GI products (tomatoes, corn, potatoes) also appeared only after the relations with America had been established… The second level is the doctrinal legal approach to intellectual property protection regarding GIs, which is based on trademarks. It is related to the pioneers' culture, much more focused on individual rights rather than on collective and State-owned rights. The third level may be the strongest one, considering that legal and economic divergences could be solved through negotiations and technical arrangements. This third level is the ideological one. The European GIs culture recognizes a central role to public authorities, which may go as far as setting the definition of the "good taste", or, at least, of the heritage which is to be preserved, in a field which is related to history and tradition as well as economic activities, with food as well as social values [16]. Such a pattern is contrary to the mainstream conceptions of New World societies. This divergence may be illustrated with the concepts of permissive and prescriptive systems of protection for GIs, according to Stern [17]. A prescriptive GI protection system imposes the definition of a close relationship between the product and its *terroir*; that is to say, through precisions on the natural and human factors involved, the system gives a specific prescription on quality. The permissive GI protection system essentially focuses on the delimitation of the area of origin, thus being closer to the indication of source in that sense. Obviously, the information given to consumers and the possibilities of innovations are not the same in the two systems.

A permissive GI protection system can, as well as a prescriptive GI protection system, establish a special legal frame of protection for GIs; this is usually the case for wines (TRIPS provisions, bilateral agreements…). Hence, the USA established the American Viticultural Areas (AVA), based on a *sui generis* registration system, which define the boundaries of geographical areas and the possibility to mix grapes or wines from different areas in relation to the GIs. Being in a permissive system, the register only deals with the geographical source of the raw material[1], and that is generally the only scope of the provisions in trademarks law as far as the registration of geographical names as trademarks is concerned: they must be non deceptive as to the real origin of the products. Certification trademarks are usually presented as the best way to protect GIs in permissive systems; but, even if rules are very strict and define the quality features in relation with the geographical environment, the registration of a certification mark is based on the intention of the group of producers «which is free to define the rules for users in line with the characteristics it chooses» [18]. In a prescriptive system there is no such freedom, because the general requirements attached to the GI category are assessed through rules of examination by the authorities before registration, according to a doctrine generally defined and applied by commissions of experts.

The more GIs are integrated to public policies, the more prescriptive their system must be, because the tool must be designed according to the political aims, and must be able to secure its positive impacts on the territory concerned. As analyzed by Sylvander et al. [19], four different and, generally, successive and overlapping sets of justifications determine the ways

1. In that regard, the first step (before the law of 1935) of the establishment of the French system of AOC was a permissive one, because it did not require any other criteria than the geographical delimitation.

GIs are defined and protected in relation to public policies: 1) the market transparency (information on quality); 2) the management of markets (limitations of quantities, generally associated to impacts on quality); 3) rural development; 4) preservation of cultural and natural heritage. Of course, such a trend has developed in European countries endowed with ancient traditions maintained in rooted local communities. But the USA position towards GIs cannot be explained by the supposed rareness of potential USA GI products or by the numerous European geographical names used to designate USA cities, villages and other places. It has much more to do with a strong value attached to individuality, a historically positive approach to innovation aiming at facilitating its spreading, a conception of the State which strongly limits its intervention in economic matters, and an industrial concentration which pushed locally specific products into the very background when the economic stakes are considered at the national and international levels.

More specifically for the case of Florida oranges, we see how the general justifications mentioned above could not be relevant. Regarding the market transparency, the main Floridian processing firms are not interested in clarifying the situation, because they opted in the 1990s for using foreign FCOJ in order to face the shortage of US production. In addition to that, the information on the geographical origin corresponds now to the distinction between FCOJ and NFCOJ. Most of the brands play on some confusion between the processing in Florida and the origin of orange fruit, without the explicit use of "Florida" being a real stake. Regarding the management of the markets, the shortage then decline of the production in Florida was not an incentive. Finally, the characteristics and dimension of the whole supply-chain and the fact that the product is seen as a mere commodity are not very helpful to mobilize stakeholders on a GI initiative which would aim at having impacts on rural development and preservation of the cultural and landscape heritage.

B. USA Geographical Indications protection

Regardless of the permissive or prescriptive approach towards the GI concept, the protection of GIs through trademarks is problematic because of the high costs which are generally associated with the protection of a trademark (e. g. monitoring of trademarks applications, administrative and judicial actions). As a matter of fact, a trademark is owned by a physical or moral holder, and the rule is that the owner is obliged to defend his IP right otherwise he might lose any legitimate claim on this right. But small and medium-sized producers cannot afford the cost of protecting the name of their product in distant markets. For the United States of America, this may not pose a big problem for producers who do not export and are covered by a trademark, as they can have recourse to the Federal Trade Commission, for example, to enforce their rights as trademark owners within the USA. But should a dispute arise abroad, producers themselves are obliged to pay the cost of legal defence, meaning only those companies with very high capitalization can consider pursing offenders [20].

The US Patent and Trademarks Office (USPTO) asserts that the trademark system is compatible with GIs. American GIs as well as foreign GIs can be recognized and protected through collective or certification marks which can bear a "source identifier". The main difference between these two kinds of marks can be summarized as follows: a collective mark is owned by an association and its use is reserved to the members of that association; a certification mark is owned by an entity which must not use it, but make it available for any user who would meet the requirements which are regularly controlled (and certified). Provided that a geographical name has acquired a secondary meaning (consumers perceive it not any longer as a source indicator but rather as an indicator for a single firm or a limited group of producers), it can also be registered as an individual trademark. Some GIs got protection according to this option in the USA, but it appears clearly that this category is somehow paradoxical in relation to the general nature of GIs, as it is mainly dedicated to deal with cases where the geographical name has lost any link with the designated geographical place in the mind of consumers. The last possibility provided by the USA legal system for GIs is the recognition as an unregistered regional certification mark through common law, that is to say through use. Cognac enjoys such a protection in the USA according to a decision of the USPTO

Trademark Trial and Appeal Board (TTAB) in 1998[2], based on the fact that this designation is recognised as a GI by American consumers, and that the Institut national des Appellations d'Origine (INAO) and the Bureau national interprofessionel du Cognac exercise a control over the use of the designation, according to an official code of practice. Except for this last option, the protection of GIs as trademarks like it is implemented in the USA is a very permissive system, in particular because no product specification is required for the registration of a collective or certification mark. Regional certification marks only require a control over the geographical source of the products concerned. In addition to that, the USPTO does not maintain any list of GIs protected as trademarks in the US, as there is no special registration procedure for regional certification marks in comparison to other certification marks. The fact that GIs do not require a specific procedure for their registration is even presented as an asset: using the standard trademarks system for GIs saves financial means and administrative resources, according to the USPTO [21]. In the USPTO, the fact that GIs are only addressed by the Office for the Administrator of External Affairs demonstrates that, for the USA federal administration, this issue is merely focused on complying with the international obligations (in particular, the TRIPS provisions) of the USA and the claims for protection from foreign GIs stakeholders.

Some authors concerned with the preservation and development of USA traditional food heritage advocate for an inventory of American GIs registered as trademarks and unregistered potential GIs [22]. Such an inventory would require a selection among the registered trademarks, those complying with the TRIPS definition, in order to distinguish them from mere indications of source. In this perspective, several current initiatives may be helpful: the American Origin Products project led by the University of Arkansas and funded by the US Department of Agriculture[3], the Traditional American Table program launched by the association Oldways[4] as well as the activities developed by the USA section of Slow Food under its Ark of Taste, US Presidia and Renewing America's Food Tradition programs[5].

The formal characteristics of trademarks in the American system differ also from the European-like GIs. "Classical" (protected either with or without registration) GIs are names whose exclusivity is granted to the legitimate producers, at least for the products of the same kind. This does not prevent authorized producers or their associations to register trademarks that include the GI, but the basic source of protection remains the sui generis GI recognition. In the US system, geographical trademarks can (and, more often, are) composite trademarks combining verbal and graphical elements. The USPTO even promises more flexibility: "the system easily accommodates geographical indications that are not merely place names, but signs such as words, slogans, designs, 3-Dimensional marks, colors or even sounds and scents" (USPTO). Such an open conception of GIs may appear as very convenient in order to protect all the objects of intellectual property which could be attached to a GI. But, in reality, it dilutes the core object to be protected, that is to say the name itself, in addition to the fact that there is no mandatory basis of definition for products benefiting from such geographical trademarks.

The enforcement of the rights on GIs shows even fundamental difficulties in such a trademark system. Indeed, trademarks enjoy no ex officio protection: the owner must always act to get his right enforced against any kind of imitation and usurpation, bearing the related costs. But even inside the trademark system, the registration of a geographical certification mark does not provide any help during the examination of further trademarks' applications comprising the same geographical names and covering the same kinds of products. This was recently illustrated by the 2008 case Idaho Potato Commission v. Blaun Industries, Inc., where the first had to bear the costs of opposing the registration of "Idaho Lite SuperFries" as a trademark.

Apart from the problems of legal protection, a permissive system of protection for GIs, like the one of the USA, does hardly allow producers and consumers to identify GI products as a specific class

2. TTAB decision in the case INAO/ BNIC vs Brown-Forman Corp., 47USPQ2d 1875, available at http://www.uspto.gov/web/offices/dcom/olia/globalip/pdf/common_law_protection.pdf
3. http://aop.uark.edu/index.html
4. http://www.oldwayspt.org/oldways-traditional-american-table
5. http://www.slowfoodusa.org/index.php/programs/

of products, in the same meaning one can find in Europe. As there are no specific requirements for the registration of a geographical trademark, except the limitation of the geographical source, such GIs convey information on the source and on a quality standard without implying a strong specificity of the product which would come from tradition and local resources. As an example, the Idaho Potato Commission authorizes not less than 27 varieties[6], making it impossible for the consumers to associate the GI with a predominant organoleptic feature.

To summarize, the US GIs landscape is characterized by

- Almost no specific public policy, GIs being fully assimilated to trademarks;
- Almost no awareness, in the society, on GIs as a specific category of products;
- A weak and costly protection based on a weak product's specification.

Having set the stage, we must examine the path followed by Florida Oranges.

C. How is "Florida Oranges"protected?

Until now, Florida Oranges has not drawn much attention from the American circles interested in promoting origin products. This may be related to the fact that this product appears as a mere commodity for most Americans (due to its production volume and its spreading scale and every-day consumption character) and that it already benefits from a public regulatory framework and a strong support from the State of Florida. As an example, Slow Food is considering three citrus in its Ark of Taste and they all come from California, in particular the Inland Empire Old-Grove oranges in relation to the Inland Orange Conservancy project[7]. In California too, a foundation named Citrus Roots dedicates itself to the preservation of citrus heritage[8]. A main difference between California and Florida lays in the way the product appears to consumers, as about 90% of the Californian oranges production is for fresh fruit. Since the tremendous development of the technology to process oranges into FCOJ in Florida in the 1940s (from 225'000 gallons in 1945-46 to 9'991'000 gallons in 1948-49 [23], only very few Florida oranges are sold as fresh fruit. Moreover, the Floridian climate does not often get cold enough for the oranges to get the color expected by consumers. Thus the labeling issue is much more influenced by the processors and retailers than by the growers.

Considering that Florida Orange(s) is the GI (as mentioned, in particular, by the USPTO in its communication), one would be surprised to find that the FDOC (nor any relevant public or collective institution) does not own a trademark comprising these words. The basic logo used by the FDOC for its advertisement campaigns is registered only as a service mark without the words "Florida Orange Juice" (fig. 3).

Fig. 3 FDOC advertisement logo
Source: FDOC website

The supposed protection granted for Florida Orange according to the USPTO did not prevent, as an example, the registration of a combined individual trademark "Florida Orange Groves, Inc & Winery" for wines in 2006, and even a firm based in California is seeking in 2010 the registration of "Florida Orange" for tobaccos.

The trademarks, labels and designations used on Florida Oranges and FOJ compose a dense jungle, in which it is particularly difficult to recognize the authentic orange tree.

The trademarks owned by public agencies to promote the production of Florida are not specific to oranges. The FDOC owns a certification mark "Made with Florida Citrus" which applies to all citrus (fig.4) whereas the certification mark "Fresh from Florida" (also owned by the State of Florida) applies to all agricultural products (fig. 5).

6. http://directory.idahopotato.com/dir_variety_index.php
7. http://www.inlandorange.org/
8. http://www.citrusroots.com/

Fig. 4 FDOC certification mark
Source: FDOC website

Fig. 5 State of Florida trademark for agricultural products
Source: Florida Department of Agriculture and Consumer Services

Some examples of trademarks focused on Florida orages are the “100% Florida” logo (fig. 6) held by Citrus World (Florida’s Natural Growers Cooperative) as an individual trademark for fruit juices and drinks, as well as the “Florida’s Natural Growers’ Pride”.

Fig. 6 Florida’s Natural trademark
Source: Florida’s Natural website

The FDOC owns all the certification marks in relationship with fresh citrus fruit registered in the Florida Citrus Code [7]. None of the marks are specific to oranges but can be used for all citrus fruit. The marks include the Florida “100% Pure” Seal of Approval, the “Florida Sunshine Tree” and the symbol “Florida with Sunburst O” (fig. 7).

Fig. 7 FDOC certification marks
Source: FDOC

The Department of Citrus encourages widespread use of the symbol and will allow any person, firm or corporation who complies with the requirements to use it. The requirements are set, for each certification mark, in the Florida Citrus Code, and are mainly based on the standard quality grading.

The market for fresh oranges from Florida is quite limited, and so is the interest for a specific labeling; but it is not the same for other citrus and especially grapefruits (cf. Indian River Grapefruit). In addition to that, as explained above, not all the processed Florida oranges will end up in cartons of 100% Florida orange juice. In fact today, only the part that will be processed to chilled un-concentrated pasteurized juice will not be blended with oranges of different origins. As a consequence, the specificity of authentic Florida orange juice may reside more in the technological kind of product (un-concentrated juice) than in the geographical origin and characteristics which could derive from this origin. Florida’s Natural products are the main of this type on the US market, and thus the cooperative’s brand may play the same role as a GI for the information to consumers.

An empirical assessment of the use of the designation “Florida oranges” in export countries other than the US shows that it must have a significant commercial value. As an example, the “Pure Florida Orange Juice” retailed by Carrefour (France) presents Florida as “one of the best origins in the world”. Another (not existing any longer) French firm, Cidou, was selling until 2009 a geographically-sourced orange juice according to four origins: Mediterranean countries, Brazil, Costa Rica and Florida. The Florida orange juice was described as being “very sweet with subtle flavors”. The major Swiss retailer, Migros, bottles in its own factory an un-concentrated pure Florida orange juice designated as such.

Contrasting with such a common use and reputation, the FDOC as well as the USPTO focus their efforts on the protection of the existing US trademarks, in particular the “Florida Sunshine Tree”. As an example, it is registered as a collective mark in Switzerland since 1991, even if it is apparently not used by processors and retailers. In the same approach, the USPTO established a work program with the Chinese Trademark Office (CTMO) in 2006, associating the Idaho Potato Commission and the FDOC. One outcome was the registration of the “Florida Sunshine Tree” by the CTMO as a GI trademark.

The fact that Florida oranges are mostly processed into juice that appears as a commodity at least for the US market, and the general use of blending with orange juice from other countries are the principal obstacles to the entire recognition of Florida oranges as a real GI. Until now, a permissive system was able to answer to the needs of the industry. But recent concerns on the preservation of Floridian orange groves as well as on the citrus production as a cultural asset may, in the future, orient some initiatives towards a more qualitative strategy based on origin.

IV. CONCLUSIONS

The Florida citrus production is a very unique example of an American industry that has established a public organization, the Florida Department of Citrus (FDOC), where growers fund a collective marketing and regulatory effort for a product that has a wide spread reputation. The policy of the FDOC has been to protect and enhance the quality and reputation of Florida citrus by establishing quality standards, registering trademarks for the identification of citrus products coming from Florida and setting up marketing campaigns focusing on the link between the final product and the place of origin.

But the industry has been functioning up until 30 years ago on the basis of an implicit GI system, as all orange juice (the most important product) came from Florida. Thus the Florida Citrus Code does not regulate the origin of the citrus used in processed products; the rules for the taxes that growers pay to finance the activities of the FDOC do not foresee the involvement of non-Floridian growers in the industry and the name “Florida orange” is not protected sufficiently to be exclusively reserved for the use of the industry. Indeed, neither the FDOC nor any relevant public or collective institution owns a trademark comprising the words “Florida orange”.

With the increasing importance of Brazilian orange juice supply to Florida processors and the interconnections of the two industries, this implicit GI system has evolved into a more complex system associating (in a dissociative manner!) multinational firms producing commodities, remaining local-rooted producers, different qualities and origins of orange juice, etc. And it seems that the regulations in place no longer fit the current situation and further more might no longer help the FDOC to fulfill its mission to protect and enhance the quality and reputation of Florida citrus. Indeed, the small and medium-sized Florida growers, who are responsible in large part for the positive images that consumers draw between Florida, citrus production, and sunshine, are finding it increasingly difficult to survive in this industry, and as the price of land in Florida continues to increase, many are opting out of the industry.

Hence, it might be that this obsolete framework (especially considering the unfairness with competing / associated non US producers…) will either have to progressively disappear or to re-focus on more relevant objectives and fields, that is to say real GI products for which the involvement of the State is legitimate and the specific promotion effective. The conflicts on the taxes used by the FDOC for advertising on Florida orange juice or generic orange juice shows that two distinctive systems may coexist in the Florida citrus sector: one devoted to the supply of commodities, competing mainly on costs and importing Brazilian juice; and the other one, building value on the Florida GI for premium products (fresh fruit, chilled non-concentrated juice…).Even a single firm can play on the two grounds.

The legal question of the intellectual property protection seems to be of the highest importance in this case, considering the effective value of the Florida origin/image on the market. If Florida producers could ensure that they are granted the exclusivity on the GI, and if the public awareness could be enhanced on the fact that not all orange juice comes from Florida, then

they would have a very valuable marketing tool in their hands.

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(anna.perret@agridea.ch & etm@surchoix.ch)