

GIS AND ENVIRONMENTAL CONSERVATION - NOTES ON EXPERIENCES IN DIFFERENT IBERIAN-AMERICAN CONTEXTS¹

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Introduction

The multidimensional reaches of contemporary environmental issues (Beck, 2010) affect the logic for promoting development strategies and inform the social construction processes of new ruralities (Jollivet, 1997; Froehlich, 2002; Brandenburg, 2010). Due to this process, environmental concerns start to give the rural territories a renewed and strategic interest by becoming the matrix of senses reframing for the contemporary rural society. Brazilian interpretations on the territorial development approach (Abramovay, 2003; Favaretto, 2006) allow us to consider that ruralities have increasingly connected their socio-productive settings to high demands that come from environmental issues. This connection may be found in experiences that, initially, were based on historical and cultural trajectories and traditional knowledge, such as differentiation strategies expressed by Geographic Indications (GIs), figures that seek to recognize and protect the connection of products with specific territories. These labels, which are widely spread in Europe but relatively new in Brazil, are approaches that are aimed at mobilizing the territories' assets, their natural socioeconomic and cultural potentials, composed of devices that recognize the origin for markets and consumers beyond their own territoryⁱ.

In this scenario, little attention has been given to relations that the GI-based strategies have established with environmental issuesⁱⁱ. Upon analysis of two empirical cases, a Brazilian and a Spanish one, we can contrast this theoretical approach. Therefore, the objective of this article is to analyze how environmental issues, in face of conservationist

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approaches towards biodiversity enhancement, permeates the production of senses, the narratives, the conflicts and the positioning of the players involved in GI experiences, in different contexts in Brazil and Spain.

For the production of data, we used mainly the ethnographic approach, based on field work and participant observation. We also resorted to interviews with several players implicated in the studied GI experiences: 27 interviews in the Spanish case and 31 in the Brazilian one. The collected qualitative data were complemented by data from secondary sources. The approach used for data analysis is from a diachronic and synchronic perspective because field work was performed in several phases from 2008 to 2014.

In the Brazilian context, in which GIs are still developing experiences, we covered the Indicação de Procedência Carne do Pampa Gaúcho da Campanha Meridional (IPCPGCM - Indication of origin of the meat from the Gaúcho Pampa Southern Campaign). This GI is inserted in the Pampa biome, whose extension, besides a wide area in Argentina and Uruguay, includes 176.496 Km² in Brazilian territory located in the state of Rio Grande do Sul, mainly composed of natural pastures. Its productive vocation in the last four centuries has been mainly bovine cattle.

In Spain, a country where the trajectory regarding GIs is consolidated, the experiences covered were: Jamón Ibérico de bellota (Dehesa de Extremadura, Guijuelo, Jamón de Huelva and Valle de los Pedroches), located in Extremadura, Castilla and Andalucía. This product derives from an Iberian pig, which terminates by feeding, for at least three months, with fruits from Oaks and Cork Oaks (*bellotas*), trees that prevail in Mediterranean woods called Dehesas, only found in the Southeast of the Iberian Peninsula. Dehesa is also characterized by a resource management mode, where extensive management of the Iberian pig is secularly the territory's main economic strategy (Campos, 1984; Amaya, 2012).

As we intend to show, the IPCPGCM trajectory is marked by several difficulties in consolidation. As they were kept that way, the initiative that is born remarkably in the industry and based on the cultural heritage references (Rio Grande do Sul tradition/cattle raising) starts to gradually give more value to environmental and conservationist issues, to the role of the European demand for ecological products, to the reinforcement of discourse from farmers involved with the Indications of Origin (IO) about sustainable development, until it ends up in the interest of conservationist entities such as SAVE Brasil and *Bird Life International* in establishing partnerships with APROPAMPA, with repercussions for both the ecological environment and the IO marketing strategies.

In turn, in face of the fierce competition in the European and Spanish context, Jamón Ibérico PODs have sought ways of enhancing the intrinsic quality of their products. Here is the main key to the environmental character of this case: such quality is associated to the Iberian breed fed with *bellotas*, which come from *Dehesas*. The availability of *bellotas*, on which the production of *Jamones* is dependent, according to the certification rules of these PODs, depends on the conservation degree and appropriate management of these woods.

What we can infer from the common GI experiences analyzed, where different social and institutional contexts are weighted, is the strategic importance that the environmental issue has taken. It led promoters to elaborate narratives about their products

beyond a simple nexus with the origin, reinforcing their discourse of connection with conservationist practices and sustainable development. We consider that this change in the discursive practice, marked by the empirical analysis, is inserted into the post-structuralism and post-development perspective (Escobar, 1995; 2010; Agrawal, 2005) about the growing strategic interest that takes the environmental dimension in the scope of several correlations of power that cross contemporary societies, in disagreement with the optimistic perspective of the so-called ecological modernizationⁱⁱⁱ.

In order to reach these considerations, this article is structured in three other sections. Therefore, besides this introduction, we covered the IPCPGCM case, then the Jamón Ibérico de bellota case in Spain, and then, in the final considerations, we sought to make a summary of what these cases represent and bring it to the current debate on the socioenvironmental dynamics and the new ruralities in the contemporary world.

The indication of the meat from the gaúcho pampa southern campaign (IPCPGCM).

In the context of Iberian occupation and colonization in South America, the wide existing native fields were used at an early stage to establish extensive livestock, which for centuries was the main economic activity in the region. Shared by Brazil, Uruguay and Argentina, the Pampa Biome is a set of ecosystems where temperate grasslands prevail. Human interaction with this biome led to the development of a unique mixed and transnational culture, represented by the *gaúcho* figure, giving reputation to the production of meat and typical dishes connected to it, such as barbecue. It was in this context that a GI proposition arose for the meat produced in a certain area of the countryside of the Brazilian Pampa, which is restricted to Rio Grande do Sul (RS).

The introduction of a cattle herd in RS happened through the action of Jesuit priests starting on the 17th century, seeking to use the wide grasslands that the southern fields uncovered. In the wide biodiversity that gives the Pampa biome unique characteristics, corresponding to types of fields where there are temperate climate rural and forest formations, different from other existing formations in Brazil, there is a great number of species, many endemic, amounting to more than 450 types of grass, 150 legumes, 70 cactus species, 385 birds and 90 mammals (Nabinger, 2007). Over time, especially due to the support offered by natural fields, bovine livestock started to widely expand and develop, with acclimatization, crossing and formation of breeds, enhancement of pastures and bovine management, elaboration of knowledge and practices by farmers; in short, a whole way of life and a *gaúcho* culture developed around livestock, with their own typical dishes, abilities, knowledge, instruments and clothing (Muchnik, 2002; Cerdan *et al.*, 2009).

Therefore, over time, human interaction with the ecosystem set a peculiar production system, being the basis for a history that coined a *gaúcho riograndense* culture and tradition, indissolubly connecting the region's history with livestock, and, gradually, a reputation started being created on the quality of meat produced there; based especially on the biological richness of the Pampa Biome, associated to the production system at the

fattening and termination of bovine cattle, this notoriety was attributed to and recognized by specific areas of the Pampa Biome, such as the Southern Campaign.

Although, according to data gathered by IBGE (Brazilian Institute of Geography and Statistics), RS is the sixth greatest producer of bovine meat in Brazil, when turning from the 20th to the 21st century, the globalization process had great impact on its bovine livestock (Malafaia *et al.*, 2006), mainly due to the competition with MERCOSUR countries, which excluded many farmers from the productive process and caused the bankruptcy of many industries in the sector. However, due to the presence of a number of strategic resources for the livestock industry in the region of the RS campaign, among which we highlight the regional vocation for cattle raising, the privileged ecosystem for its production, the tacit knowledge of farmers, the pasture characteristics and native field extensions, as well as the reputation of the meat produced, a GI figure started being considered as an alternative to react to the crisis and keep competitiveness in the sector.

Therefore, after many institutions (Sebrae, Senar, Farsul, Embrapa, Ufrgs) worked with farmers of the Southern Campaign from the assumption that the bovine meat from the gaúcho pampa had become a typical product of the region with significant reputation, an Indication of Origin claim was formulated. The IO request was made by the Associação dos Produtores de Carne do Pampa Gaúcho da Campanha Meridional – APROPAMPA (Association of the Southern Campaign Gaúcho Pampa Meat Producers), founded in 2005 by 17 farmers of the region, with the objective of meeting the legal demands for the registration of the GI. On 12/12/2006, it obtained the grant for the registration of an IPCPGCM recognition for the product *bovine meat and its derivatives*. The IPCPGCM production zone is located inside the Pampa Biome, and comprises a part of eleven towns. This area, located in the middle of RS, was delimited according to the botanic characterization of the fields in these towns, called fine fields, and also of type and use of soil.

According to the technical regulation of the IPCPGCM quality, the cattle able to provide meat that can carry the IO must come exclusively from the breeds Angus and Hereford, introduced and well adapted to the Pampa in the 19th century, or a crossing between them. The feeding authorized for the animals supported by this IO is basically native pastures and enhanced native pastures, and they can also be terminated in winter, native or exotic cultivated pastures, under extensive conditions. The cuts initially proposed to be intended for commercialization with the IO seal were 7, intended for barbecue: rump cut, entrecote, strip loin, filet, skirt steak and ribs.

IPCPGCM: trajectory, situation and current dilemmas

In the initial process of constructing the IO regulation, there was a very excluding process, where a restrict group of individuals was responsible for the main definitions. One of them was particularly controversial: the restriction of production only to breeds Angus and Hereford. It was controversial because, although the region had already gotten reputation and tradition in the raising of these breeds, there were (as there still are) several farmers that work with other breeds and several levels of crossing among them, which does not allow their participation in the IO. There are talks that this restriction was only

to meet the interests of some large farmers, hindering the access of some other farmers of the region to the GI. However, such restriction also affects several of the APROPAMPA associates themselves, who face difficulties in producing the meat in accordance with the rules, as they claim that it is difficult to obtain pure breed animals.

Some of the people interviewed affirmed that obtaining the IPCPGCM has not yet had any direct impact in terms of adding value for farmers inside the territory. In fact, they highlight the fact that they have not reached what was one of the main initial objectives of the farmers when founding APROPAMPA, that is, they have not yet obtained a significant added value on their products. The priority established by APROPAMPA and their partners, in face of the GI work, was the addition of value to the meat from the market price of up to 5% in 2008, 10% in 2009 and up to 15% in 2010 (Cerdan et al., 2009). However, other interviewees considered that the addition of value does not result in an immediate internalization of the movement by consumers, who need time to realize that the product they are consuming is different and that it is worth paying a higher price.

After obtaining the IO seal from INPI, they opened it for new APROPAMPA associates, seeking to put away their exclusionary image, causing a considerable number of associations to join the organization. This opening also corresponded to the attempt of reaching a higher production scale for the supply of products with IO characteristics. However, because the initial objective of adding value to the product was not reached, the farmers were demotivated and, at the same time, the process of mobilization and clarification of the importance of the IO for these new associates was discontinued. Currently, APROPAMPA is composed of 106 farmers, in addition to 1 slaughterhouse and 2 retail companies.

Thus, a problem still stands since the IO was obtained: the low production scale, whose slaughter average never exceeded 50 animals/week. At first, this problem led to difficulties in processing the meat because it was difficult to find a slaughterhouse that would accept to transform a product with low scale and that should be separated from the others for the IO specific destination. Several factors are associated to this low scale, from restrictions imposed by the technical production regulation related to breeds and feeding to the fact that there is no addition of value to the product, which did not motivate the farmers to increase the production with the IO brand. In addition, since only 7 cuts may be intended for commercialization with the IO seal, the use of the skeleton is very limited.

By the end, this low production scale intended for IO causes a regularity maintenance problem in the product supply in retail. Actually, this low supply was never able to satisfactorily serve the internal market; therefore, although the export of meat was the initial goal, it does not seem to be a realistic objective of APROPAMPA's. Currently, there is only one slaughterhouse associated to APROPAMPA which can slaughter for sale with the IO seal. This fact contributes even more for the limitation of product supply, once not all associates slaughter exclusively in this slaughterhouse.

But it is not only the meat with IO characteristics that is scarce in the sector. It is important to highlight the context in which the sector has been facing lack of product supply in the general market of bovine meat. As soon as the scenario of increase in the demand for bovine meat in the market was set, other slaughterhouses felt motivated to

offer the farmers better prices than the ones practiced by the slaughterhouse associated to AFROPAMPA. When the farmers did not earn a significant added value on the product to intend it for IO, they started selling meat to the slaughterhouse that would pay more, reducing even more the supply for the product with the IO seal in the market. In addition, some AFROPAMPA associates are also connected with programs of their respective breeds, which leads to competition for the product and tendency to negotiate with buyers that give them more commercial advantages.

According to Malafaia *et al.* (2006), beef cattle in Brazil may be analyzed under two prevailing characteristics. On the one hand, there is *diversity*, which is set in the great variety of breeds, raising systems, slaughter sanitary conditions and commercialization forms. On the other hand, there is *incoordination*, established by the low stability in the relations between farmers, slaughterhouses, wholesalers and retailers. In addition, the relations between the several segments of each chain take effect via market, enabled by the consideration of bovine meat as a *commodity*. According to the authors, the main factor that would induce to such a way of organization is the low specificity of negotiated products. However, it is worth mentioning that the GI strategy set in the IPCPGCM experience was intended to precisely escape this problem.

The most recent information on IPCPGCM states that there was a general new discussion process of the IO regulation, aiming to make it more flexible and accessible to a greater number and types of farmers, with total suspension of the meat produced and certified with the GI seal. The inclusion of the Braford breed in the IO is being speculated, as well as commercial relations with other slaughterhouses for slaughter, changes in the logo to make it easily recognizable by the consumers, negotiations to open an access channel to niches from the European market, etc. These changes are all, in great part, due to relations that have been established and consolidated around environmental conservation of the Pampa Biome, which enabled new positioning and discourses by these players, as we cover below.

IPCPGCM and the environmental issue

The environmental conservation issue of the Pampa Biome has been the target for sociopolitical intense debates and concerns in RS. In the area delimited by IPCPGCM, a considerable plot could not be used anymore for the purposes of the IO itself, due to environmental degradation of the Pampa Biome. In order to improve competitiveness of agricultural production, several experiences and projects of introduction of exotic genetic material were implemented in the native pasture areas, threatening the specificity and sustainability of the ecosystem (Cerdan *et al.*, 2009). In addition, the recent promotion and expansion of great areas destined to the planting of exotic forest essences and soy monocultures have contributed to the decline of areas with native fields (Froehlich *et al.*, 2006).

The environmental dimension gained crucial importance in the IPCPGCM trajectory, not only because its technical regulation prescribes the conservation of the native field as a basis for the production system in the territory, which demanded awareness actions from APROPAMPA towards its associates, but also because such environmental

issue points to relations with several other players and decision makers that seem to have potential to directly affect future IO viability.

It is illustrative, in this sense; that is, the fact that the technical regulation of APROPAMPA demands that the production system be based exclusively on the native field was the repercussion and interest of other entities and Non-Governmental Organizations (NGOs) connected with issues of environmental conservation, especially conservation of the Pampa Biome. This interest resulted in a partnership with the NGO SAVE Brasil, which worries about the preservation of migratory birds. SAVE Brasil is affiliated to *Bird Life International*, which is active in more than 100 countries.

In the sustainable development discourse, the use of natural resources within a territory is considered a process to be built socially through the co-management of these resources between communities and governments, through negotiations from different representations (Flores, 2007). Some of the fruits from the partnership between APROPAMPA and SAVE Brasil may be observed through the contribution of human resources, as well as its support infrastructure in order to work with the Association. Based on its associates' testimonies, this partnership, in addition to representing crucial support for the maintenance of APROPAMPA in the sense of overcoming some difficulties, also represents another strategy based on recognition devices, besides GI, now with the appeal intended explicitly for environmental issues. The perspective is to add, after some ongoing studies, another seal to the IO bovine meat, with the appeal that the product, in addition to having the quality characteristics already proven by IO, is also produced by a *conservationist producer*.

However, it should be highlighted that, in spite of the conservationist discourse of the biodiversity connected to the promotion of products by IPCPGCM, the territory delimited by IO is located in a region where there are constant disputes and conflicts regarding the Brazilian policy of land reform. In this sense, one of the people interviewed talked about GI from a strategic perspective of creating a positive image, based on environmental aspects that would soften those disputes in favor of the great landowners of the region. Therefore, we can realize that the APROPAMPA associates wish to convey the image, with the help of local research and development agencies, that the extensive livestock is directly related to the beneficial impacts on the environment and the conservation of a unique ecosystem. Here, there is a peculiar and interesting entanglement between the land issue and the environmental issue.

In short, the IO strategy is not yet consolidated in this territory. Among the causes is the non-existence of a meat production supply for the IO seal. Another aspect refers to the restrict number of farmers affiliated with APROPAMPA in face of the coverage of the delimited area, causing the low production volume mentioned previously, in addition to their limited participation in the provision of raw material for the IO. Another problem is the relationship between the segments (producer-industry-retail) of the productive chain, which hinders the rural producer from having better income due to the possible product added value. There are also environmental problems, especially regarding the loss of areas of native field, whether by environmental degradation or by use by other activities, pointing to a physical-spatial limitation in the future.

Therefore, the IPCPGCM experience has not produced the expected effects to the extent that it could be considered an approximate strategy to the sustainable development of territorial basis (Froehlich and Dullius, 2012). It is conformed as a still eminently sectorial strategy, where economic objectives guide the promotion and disclosure of the product with territorial value, generically incorporating the local culture to a better position in the markets, instead of seeking to attract a flux of people and players to the territory, which could result in benefits beyond the club of players in effect. As to the environmental objectives, there is doubt if the actions undertaken are guided by a genuine environmental awareness from which the product added value is elaborated or if it is more oriented towards a perspective of creating favorable arguments to face land conflicts that are recurrent in the region.

The IPCPGCM trajectory shows that this initiative is born remarkably in the sector and is based on cultural heritage references (gaúcha tradition/cattle raising). Nevertheless, the difficulties for its consolidation must be considered and, maybe because of that, it has been gradually given more value to environmental and conservationist issues involved in the IO territory, to the reinforcement of discourses from farmers involved with IO about sustainable development, until it ends in the interest of conservationist agencies such as SAVE Brasil and *Bird Life International* in establishing partnerships with APROPAMPA, with repercussions for both the ecological environment and the IO marketing strategies.

As Cerdan *et al.* (2009) point out, GIs in Brazil do not seem, at first, to be an instrument thought to establish a channel between economic appreciation and environmental conservation; and, in this context, despite its notorious insufficiencies, the IPCPGCM experience has led its players to confront and relate to other different players and visions on the territory and its biocultural resources. That can make them think about their own relations and positions, assuming new postures on the socio-economic and environmental dynamics of their territories.

The jamón ibérico protected designations of origin (PDOs)

In the Spanish collective imagination about the best food products, Jamón Ibérico stands out. However, on the production territory itself (regions of the south of Spain and Portugal), as well as internationally, little is known about the origin and preparation of this product. Therefore, it is worth unveiling some particularities of this type of jamón compared with others in the world, so that we can better detail which players are involved in this context and their roles in resizing the environmental variable in a concrete European territory, in which the existence of GIs has, for decades, carried new meanings of environmental conservation.

Among the several swine breeds that adapted to different environments and regions, there is the one named Iberian pig, from the Southeast of the Iberian Peninsula. Spain ranks 4th as a producer of swine and derivate products, coming after China, the USA and Germany. According to the data from the Ministerio de Medio Ambiente, Rural y Marino (MARM, Spain), the swine herd in 2011 had 25,634,869 animals. Out of that number, Iberian pigs represented a little more than 10% of the swine production

in Spain. In addition, only 18.30% of the Iberian pigs were fattened in extensive regime with bellotas, the fruit which was attributed with the capacity of providing special organoleptic characteristics to the quality of Jamón Ibérico (ASICI, 2011).

This management system is carried out in a grove that is considered unique in the planet, called *Dehesa*, in which the presence of the Iberian pig is a determining factor. It is an omnivorous breed, with high prolificacy. It consumes a wide umbrella of resources, the period between birth and reproduction is short, its production is appropriate for self-consumption of domestic groups because it may be consumed almost entirely etc. In *Dehesas*, the Iberian pig found a particularly favorable habitat, where it can feed from a variety of resources throughout the year. Bellota is its staple food during the *montanera*^{iv} period, a resource that Iberian pig make use better than any other species. Bellota is rich in carbohydrates, has low protein content of proteins, fat and cellulose, the reason why pigs make better use of it than any other cattle characteristic from the *Dehesas* (bovine, caprine, sheep, or equine), since it does not digest the cellulose and transforms the hydrates into fat (Montoya, 1980), infiltrating it in its body muscles. This is its differentiating factor, because it gives organoleptic characteristics to Jamón Ibérico de bellota. Therefore, pigs graze on the *Dehesas* throughout the whole year in a variable number, depending on the establishments, and their presence and raising is generally in an extensive system, converting into a priority herd during the *montanera* and in the main source of income for many farmers.

What we have just described has generated a perception on the socially amplified binomial *ibérico-dehesa*, that is, the connection of the Iberian pig of bellota with an agro-ecosystem, *Dehesa*. This binomial encloses the socially constructed and shared premise that Jamón Ibérico is indissolubly connected with an anthropic territory, which is the type of Mediterranean forest called *Dehesa*: one would not exist without the other. We are pointing out that the productions of Jamón Ibérico de bellota depend in great part on the care and the work done in the woods. These types of livestock management are a form of territory management based on traditional farming practices which surround the already mentioned *montanera* or ripening season of the bellota. In fact, we can affirm that *Dehesa* is currently profitable basically due to the Iberian pig of bellota, from where, connected to a (*Dehesan*) territory, comes a historic and high quality product: The Jamón Ibérico de bellota.

The tradition in the production of the bellota Iberian pig are relative to farmers that use the *montanera* for raising pigs according to the management system, which seeks to optimize the use of this resource. Basically, it assumes a grazing specialization, including the conduction of the herd through different points of the woods in order to foster the consumption of bellotas that ripen gradually. That is the part of a very wide umbrella of management intended to optimize the *Dehesa* resources.

In order to close this characterization of the *Dehesa*, it is worth mentioning that it is an anthropic medium, formed by human action for centuries and with a complex balance. It is a type of domesticated grove, which has been many decades far from reaching its maturity and that, due to the poverty in its soils, would make it very difficult to replace *Dehesa* by another profitable use in the medium term. The maintenance of

Dehesas depends on what is being productive for the societies of the territories where they are. It is characterized by scarce productions of biomass in each agricultural cycle, which does not enable the maximization of only one resource, whether livestock or agricultural. Optimizing the production of this medium through a multiple-use system has been the great virtue of the inhabitants of the Dehesan territories (Amaya, 2012). The restrictions of soil and climate have been overcome by supplementing a great variety of resources incrementally.

Therefore, we refer to a traditional system of multiple use of the territory that consciously articulates livestock, agricultural and forestry resources. The groves in the woods, composed mainly of Oaks and Cork oaks, is the most representative element of Dehesa; among its multiple functions (erosion control, wildlife refuge), one can find: economy, tangible by wood, cork, foliage and, above all, bellotas. These managements, learned for centuries, have been transmitted through generations until the current farmers, keepers of practices, techniques and knowledge that apply accurately to the sustainability of this agroecosystem (Amaya, 201). Such traditional management ways of a grove such as Dehesa are the ones that now are reinterpreted and take on new meanings from the scope of certified productions, elaborations of food that respect the environment and according to the non-industrialized productive processes. This is the general characterization of a production model that is considered to be and positioned as traditional. It is precisely this tradition that now starts to be a patrimony through its reinterpretation in the PDOs of the sector. According to Amaya and Aguilar (2012), they are efficient innovation formulas in the recovery of traditional formulas. We will now see the role of the certified Jamón Ibérico de bellota in this European post-industrial context and its relation with the environmental conservation discourse.

The Jamón Ibérico PODs: environmental repercussions

The PODs of the Iberian sector in Spain started to be managed in the 1980s and currently there are four of them: *Guijuelo*, *Dehesa de Extremadura*, *Jamón de Huelva* and *Valle de los Pedroches*. The creation of these quality seals assume the appreciation of two of the main parts of the Iberian pig, known as *jamones* and *paletas*, characteristic from the southeast of the Iberian Peninsula, where there are three million hectares of Dehesa, especially in the Spanish zone. Therefore, it is only in this territory that we can find the PODs of Jamones Ibéricos de bellota, recognized as having excellent quality.

However, it is not in the macroeconomic figures that the relevant data on the interaction between the food quality seals and the conservation of territories belonging to such PODs reside. In this case, these PODs seek to fulfill functions such as: a) legally protecting the jamones against producers from other zones without Dehesa that may want to take advantage of the reputation of Jamón Ibérico de bellota; b) guarantee a high level of quality to the consumer; c) keep the quality of the products and preserve traditional uses and management of production. Therefore, there is a connection of the product jamón with its original territory, with a certain ecological environment and with uses and management that are part of the local history and culture. It is what gives this

jamón its specific characteristics and grants to it its added value that differentiates it and enables it to open a specific niche in an increasingly competitive market.

At first, the interests of these PODs may look similar to the IPCPGCM ones, previously analyzed, and also to other cases widely analyzed, in cases with products like cheese (Cervantes *et al.*, 2012). Other similarities can also be pointed out between both cases, such as the scarce integration of a significant part of the livestock sector in these certification formulas. Even if they are non-exclusionary procedures and open to those who voluntarily adhere to the rules of a POD, whose monitoring is carried out by the Regulatory Council (RC) so that they can be fulfilled. A clear limit is established that makes it unfeasible for small and many medium farmers to adhere to the rules^v. This fact results in a potentially conflicting reality. They are rules that contribute to the fact that large landowners can have a larger income from other farmers. The field work unveiled that these large landowners are the ones that consciously use, most frequently, the certification of their pigs, and the Dehesa conservation connected with it, as a positive value connected with the conservationist ideology of natural spaces, an ideology which they take part in, as they declare themselves explicitly conservationists.

Together with these landowners, one can find the main ideologists of Dehesa conservation defense in the PODs: the managers of the PODs RC, which permanently occupy a relevant position in one of them. They are PODs employees, with non-elective and changing positions just like the rest of the members of each RC. Their main role is to defend their brands, form opinions with the sector, represent them in important meetings and form the public image of each one of these seals. They have leadership positions in their territories and, along with the managers of the so-called Comarcal Development Centers, influence the discourses and arguments on environmental conservation in their territories in the context of rural development of the European post-industrial society.

The PDO CRs have programs for the control and monitoring of productions, both of the pigs throughout their lives and after slaughter and of the jamones during their three years of maturation. This is a mechanism that directly falls on the conservation of Dehesa, since it controls the animal load on the area and the harvest status of the bellotas. It is an update of the traditional management system of a Dehesan property. It is about the necessary care given to the Dehesa agroecosystem, when bigger and better productions are intended. The PODs are limited and monitor the food of pigs, which, for 3 or 4 months of *montanera*, can only be fed with bellotas. That is why farmers have an important motivation to prune trees periodically and keep Dehesa with strong and productive trees, even under huge livestock pressure, relived in part by these POD rules.

The traditional Dehesa exploration system is considered and reinterpreted through PDO regulations. In order to illustrate, the POD regulation *Guijuelo* collects data referring to the exploration system, pointing out that: “Las prácticas de explotación del ganado inscrito en la Denominación de Origen se adaptarán preferentemente a las normas tradicionales de aprovechamiento de montanera en régimen extensivo ...” (Art. 6^o)^{vi}, or on the quality of the jamón, saying that the “Clase I. Jamón ibérico de bellota, procedente de cerdos primales que hasta los 80 kilogramos han comido pienso, rastrojo y hierba, y que el resto del peso hasta los 160-180 kilogramos lo han completado a base

de bellota y hierbas en montanera” (Art. 16^o)^{vii}. These are some details that allow us to point out that the owners of Dehesas supported by a POD are predisposed to better take care of their woods. Since these pigs do not receive any other food supplement during the *montanera* months, which is explicitly prohibited in the regulations of the PODs, these farms frequently carry out maintenance work on the grove (reforesting, thinning, prune...) to provide a good supply of bellotas.

Therefore, in the 21st century, there was a reinterpretation of the techniques and secular managements from the PODs which actively contribute to the conservation of the Dehesas. Although these practices have been known for centuries, there are many cases of explorations supported by a POD that have recently started to revitalize and reframe such practices. These new meanings are directly related to the functions of the territories in the European rural world and with the effects of the rural development policies in the core of the European Union (PAC), where values such as tradition, nature and history have become strategic (Aguilar and Amaya, 2007; Lozano, 2011).

Final considerations

We described the reality of concrete territories where Dehesas prevail, old rural territories where new policies and strategies (PAC and PDO) with a high ideological load on conservation of natural spaces and highlighted by environmental values point out to new senses and meanings in contexts such as the ones of Dehesas, which for decades suffer pressure that may threaten their existence.

We registered a strategy that seeks to meet the demands of many industries in European societies that are willing to pay a higher price for products such as Jamón Ibérico de bellota, in case they are supported in formulas capable of guaranteeing that their procedures are respectful of the environment and socially fair. Therefore, these spaces acquire new meanings in the current European context, so that the strategies of distinct origin (rural development plans and quality products certification) converge partially to common interests related to the conservation of Dehesa, which depends on the existence of its inhabitants.

Differently from IPCPGCM, the Jamón Ibérico PODs are completely consolidated experiences, recognized in the regional and national markets. We can say they are expanding, because they started a few years back to export Jamones Ibéricos de bellota with PDO to different countries. On the other hand, if at the IPCPGCM the discourse on the defense of the environment is related to international organizations such as *Bird Life International*, in the case of the Jamón Ibérico DOPs it is about a conservation line that comes from the territory itself, from agents such as large landowners, the CR of the PODs and their managers.

What we can infer from the common GI experiences analyzed, where different social and institutional contexts are weighted, is the strategic importance that the environmental issue has taken. It made the promoters elaborate narratives about their products beyond a simple nexus with the origin, reinforcing their connection speeches with conservationist practices and sustainable development. If, in Brazil, such approximation

to the environmental cause is due to the notion that GI is still not spread among the farmers and the consumers, when comparing to the greater appeal and social legitimacy that the environmental flag has, in the Spanish context this approximation seems to be due to the opposite: the wide spread of quality brands justified based on the source, so the environmentalist discourse serves to complementarily differentiate that it adds commercial value to the product and has more legitimacy in society when also preserving ecosystems.

The quality differentiation strategies, such as GIs, today, are placed in a context characterized by disputes and debates about the configurations that the new European rurality must assume (Froehlich, 2012), as well as the Brazilian one. The strategic position that the environmental dimension has taken is notorious regarding differentiation initiatives even under such diverse socio-institutional contexts. Vital resources, agrobiodiversity, biomes and their potential are a dispute field where there are interests from many social agents, connecting them with the post-structuralism perspective of Foucault's inspiration (Escobar, 1995; 2010; Agrawal, 2005), recognized as biopolitics. The immanent relation of environmentalism with preservation of human life conditions puts widely into question the notion of "life network". Our time, therefore, is marked by the increasing integration of vital resources to the power-knowledge *apparatus* configuring the relation between GIs and environment preservation private statements in the production of sustainable development discourse.

Notes

- i Currently, Brazil has 44 recognized GIs (<http://www.inpi.gov.br/menu-servicos/indicacao-geografica/arquivos>), while Spain has 170 (<http://www.magrama.gob.es/es/alimentacion/temas/calidadagroalimentaria/calidad-diferenciada>). Accessed on 10-03-2015. For a recent outlook on Brazil's and Spain's GIs, please see Tolon and Lastra (2009), Wilkinson and Cerdan (2011), Silva et al. (2013), Niederle (2013), Wilkinson and Mascarenhas (2014).
- ii Although international literature has recently begun to pay a little more attention to these relations, they are still below the necessary amount, as mentioned by Guerra (2011). In Brazil and Spain, this analytical focus is even less frequent.
- iii The ecological modernization is inserted in the scope of reflexive modernization, seeking to overcome the classic industrial categories, but keeping their faith on the possibility that technological progress may be able to equate environmental issues and promote sustainable development (Beck, 2010; Andersen; Massa, 2000; Mol; Spaargaren, 2000).
- iv Ripening period of bellotas, which lasts from November until February and which corresponds to the fattening period of the pigs it feeds.
- v As far as Spain is concerned, let us think that a small property (30-100 hectares) or a medium one (more than 100 hectares), in order to certify for a POD, must reserve a considerable part of the Dehesa for exclusive use of the pigs for about four months, which reduces their resources for the rest of the cattle, which will have to be supplemented with food from outside the property.
- vi Exploitative practices of cattle registered in the Designation of Origin will be preferably adapt to the traditional rules of use of montanera in an extensive system [our translation].
- vii Class I. Iberico bellota ham, from pigs yearlings weighing up to 80 kilograms have eaten feed, stubble and grass, and the rest of the weight up to 160-180 kilograms have been supplemented on acorns and herbs in montanera [our translation].

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GIS AND ENVIRONMENTAL CONSERVATION - NOTES ON EXPERIENCES IN DIFFERENT IBERIAN-AMERICAN CONTEXTS

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Abstract: Current environmental issues have affected the logic for promoting development strategies and social construction processes of new ruralities. Therefore, rural territories start connecting their socio-productive settings to high demands that come from environmental issues. In this scenario, little attention has been given to relations that the Geographic Indications (GI) based strategies have established with environmental issues, whose strategic interest lies in the scope of multiple correlations of power that cross contemporary societies. Through a multiple case analysis, by contrasting contexts from Brazil and Spain, we used this theoretical approach to analyze how environmental issues, in face of conservationist approaches towards enhancing biodiversity, have permeated the production of senses, the narratives, the conflicts and positioning of the players involved in GI experiences in different Iberian-American contexts.

Keywords: Geographical Indications, differentiation strategies, environmental conservation.

Resumo: A problemática ambiental contemporânea tem afetado a lógica de promoção de estratégias de desenvolvimento e os processos de construção social de novas ruralidades. Assim, os territórios rurais passam a vincular suas configurações socioprodutivas às demandas amplas que advêm da problemática ambiental. Neste cenário, pouca atenção tem se dado para as relações que as estratégias baseadas em Indicações Geográficas (IGs) têm estabelecido com a problemática ambiental, o que tem interesse estratégico no âmbito das múltiplas correlações de poder que atravessam as sociedades contemporâneas. Através de análise multi-caso, contrastando contextos de Brasil e de Espanha, utilizamos este enfoque teórico para analisar como a problemática ambiental, mediante abordagens conservacionistas de valorização da biodiversidade, tem permeado a produção de sentidos, as narrativas, os conflitos e os posicionamentos dos atores envolvidos em experiências de IGs, em diferentes contextos iberoamericanos.

Palavras-chave: Indicações Geográficas, estratégias de diferenciação, conservação ambiental.

Resumen: Los problemas ambientales contemporáneos han afectado a la lógica de la promoción de estrategias de desarrollo e los procesos de construcción social de las nuevas ruralidades. En este escenario, se ha prestado poca atención a las relaciones que las estrategias basadas en las indicaciones geográficas (IG) han establecido con los problemas del medio ambiente, que tiene un interés estratégico en el contexto de las múltiples correlaciones de poder que se mobilizan a través de las sociedades contemporáneas. A través del análisis de dos casos empíricos, uno brasileño y uno español, podemos contrastar este enfoque teórico. El propósito de este artículo es analizar cómo los problemas del medio ambiente a través de la abordaje de la conservación de la biodiversidad, impregna la producción de significados, narrativas, los conflictos y las posiciones de los actores involucrados en las experiencias de IGs en diferentes contextos de Brasil y España.

Palabras-clave: Indicaciones Geográficas, estrategias de diferenciación, conservación ambiental.
