

SERRANO CHEESE (HIGHLANDER CHEESE)

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INTRODUCTION

In southern Brazil, in the state of Rio Grande do Sul, cattle raising has been an historically important activity, crucial for the formation of the economy, the culture, and even for the demarcation of the borders of the state. The activity was favored in the grassland ecosystems of the ‘Campanha’ and ‘Campos de Cima da Serra’ regions. The latter is located in northeastern Rio Grande do Sul, which is where the Serrano Cheese is produced. Its production dates back to the period when land was occupied by the first non-indigenous peoples. The cheese has peculiar features and is still produced artisan style. Cheese production from milk drawn from cattle raised for slaughter is a peculiarity of the system, as cheese production was not the primary intended purpose. On the other hand, cheese has acquired a growing importance in the family businesses. The locally produced cheese is appreciated by consumers, and also has the potential to generate positive external income; it is both a source of income and jobs, and contributes to maintain both local culture and the local ecosystem. Since its production happens in an area unsuitable for large-scale agriculture, many of the traits of the production system have kept unchanged over time. The same is also true of the social structure, which has not changed much. Also, because it is located in an ecosystem of natural grasslands, helping support the cattle raising system with cheese production entails the conservation of a sustainable mode of exploration of the natural

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resources, which brings along with it the conservation of cultural and historical values (Ambrosini, 2007).

JUSTIFICATION

In Rio Grande do Sul, cattle raising has been an historically important activity, crucial for the formation of the economy, the culture and even for the demarcation of the borders of the state. The activity prospered in the grassland ecosystems that characterize the ‘Campanha’ and ‘Campos de Cima da Serra’ regions. In these areas, the Jesuits raised large herds of *bovine cattle* extensively, which were called “Vacaria del Mar” and “Vacaria de los Pinhales”, respectively, the latter dating back to the 18th Century (Flores, 1986).

The Campos de Cima da Serra are located in northeastern Rio Grande do Sul and have in their history, since the first non-indigenous peoples were settled, the activity of cattle raising as a major trait. Nowadays, data from Ries and Messias (2003) indicate that the activity is still the main form of land use in this region: more than 90% of the rural property areas is devoted to it.

When we refer to the activity of cattle raising and/or to the families that work with cattle raising, we mean those family businesses that have the raising of cattle for slaughter as their main activity. In these cases, most properties in the region (about 80%) have up to 200 hectares. Usually, a 200 hectares property is not considered small. However, for the full cycle of cattle raising in Brazil, that is, for grass-fed cattle raising, breeding, and finishing, and taking into account the weather patterns of the region that bring about deficits of grass

during winter and thus demand small herds per area (1 AU / 2 ha)¹ (Mohr dieck, 1993), i.e. a low productivity of beef/year, we could conclude that cattle raising in the Campos de Cima da Serra is not viable. In reality, however, that conclusion stands refuted, and the cattle raising systems has persisted intact or with adaptations over time.

In the systems to which we refer, cattle production follows a low scale economy, and family income depends primarily on the combination of that activity with others that will ensure economic and social reproduction for the families. Some consequences of the activity can be highlighted beforehand straight away: tourism, which benefits from the infra-structure of the properties, as well as from the weather conditions of the region, where the cold climate is an attraction; and the production of the so-called ‘Serrano’ cheese.

Cheese production appears as an important source of income for the families in this system. In properties with up to 200 ha, the cheese can represent up to 50 % of the annual net income (Ries e Messias, 2003).

Table 1 below contains information on the production of the Serrano Cheese, provided by EMATER/RS, which, when compared with data from the Brazilian Institute for Geography and Statistics (IBGE), shows that a significant portion of the families in the cattle raising business are also involved in cheese production in certain municipalities.

¹ AU (animal unit) is an index used as a standard of measure which allows for comparisons across different categories and species of animals. One (1) AU corresponds to 450 kg of live weight, which roughly equals the weight of an adult cow.

Table 1 – Cattle ranchers who produce Serrano Cheese in the Campos de Cima da Serra

Municipalities	Number of Properties*	Number of Cheese Producers**	Annual Yield** (t)	% of cattle ranchers that produce cheese
Bom Jesus	1218	250	183	20.53
Cambará do Sul	588	66	35	11.22
Caxias do Sul	3930	145	79	3.69
Jaquirana	515	150	45	29.13
São Francisco de Paula	2188	250	365	11.43
São José dos Ausentes	603	250	75	41.46
	9042	1111	782	11.29

* Source: IBGE, 1995-96

** Source: EMATER, 2005

Serrano Cheese dates back to the time of the occupation of the territory² by the first non-indigenous inhabitants (Barbosa, 1978); it has specific characteristics, due to the type of grasslands available, which is determined by the climate of the region, as well as the type of animal that is used, since milk from bovine species raised for slaughter has a higher fat content, and the way it is processed, which among other peculiarities uses raw, non-pasteurized milk.

The production of cheese out of milk drawn from cows raised for slaughter is a peculiarity of the system, since it was not intentionally organized for the production of cheese. Thus, we understand that the production of the Serrano Cheese should be analyzed within the historic and cultural context of the region, where the activity is a tradition and its know-how is shared by the community.

Nowadays the activity is a source of income for families that raise cattle for slaughter. The cheese is produced artisan style. Each property has a room in which the cheese is produced, usually right next to the place where the cows are milked, and the cheese is made immediately after milking, by the rancher and his family.

² In this paper, territory is understood as an “appropriate” space, “a social construction, which in turn proceeds from an environmental patrimony and a cultural patrimony” (Linck, López and Cabianca, 2006, p. 113).

The cheese business seems to have a growing importance in the occupation of the family members, and the Serrano Cheese is not only recognized and sought after by the consumers of the region of the Campos de Cima da Serra and neighboring areas but may have the potential for bringing about positive external revenues, as it is both a source of income and jobs. Furthermore, the Serrano Cheese helps maintain the local culture and ecosystem.

However, this is a system in crisis, since the cattle raising activity is squeezed by its low-scale production, which has been made worse by the low market value of the animals sold for slaughter. On the other hand, concerning cheese production, the 'clandestine' character of its production does not allow for its market value to increase, since access to markets is in some cases limited.

An alternative for the Serrano Cheese lies in the branding and protection of the product through a system of quality and origin certification, which would relate the product to the historic and cultural elements linked to the territory.

LOCATION AND DESCRIPTION OF THE TERRITORY

The Campos de Cima da Serra is the highest region in the state of Rio Grande do Sul; it is located at the state's northeast, and its altitude varies from 400 to 1400 meters above sea-level. It has a population of 148210, 30% of which live in rural areas. For comparative purposes, it is worth mentioning that the state of Rio Grande do Sul as a whole has a population of 10 million people, of which 20% live in rural areas (FEE, 1998). The Campos de Cima da Serra region has a low demographic density (2 a 10 residents/km²).

In environmental terms, it is the coldest region of the state, presenting the following average temperatures:

- Spring: 13.1 degrees Celsius
- Summer: 19.2 degrees Celsius
- Fall: 14.4 degrees Celsius
- Winter: 7.9 degrees Celsius

Rainfall follows an annual average of 1500 to 2000 millimeters, well distributed throughout the year.

HISTORY

It is not possible to define precisely the period in which the artisan production of the Serrano Cheese began, but some information indicate that it was widespread in the 18th and 19th Centuries. The main activity, since the occupation of the land by the first non-indigenous peoples (from 1760 onwards), was cattle raising for slaughter. And although nowadays there has been some diversification, especially in areas more adequate for agriculture, cattle raising for slaughter is still the predominant activity in areas that are considered marginal.

The first settlers of the Campos de Cima da Serra were men that took part in the “tropeadas”*. As soon as the war between the Portuguese and the Spanish ended, in other words, as soon as the conditions for settlement were in place, those men began to settle in the Campos de Cima da Serra (Barbosa, 1995). They arrived at the region attracted by the excellent natural grasslands, where free roaming wild cattle could be found (Barbosa, 1978).

* “Tropeadas” were groups of men on horseback that took cattle and other products on journeys to the slaughterhouses or marketplaces.

The main product of this system were hides. Cattle was slaughtered for their hide and fat. Just about everything was then made with leather: boxes, chests, large baskets (“canastras”), canoes (“pelotas”), canopies, nets, the underside of beds, and even coffins. Soon afterwards cattle began being commercialized “on foot” (alive), along with mules, and was taken by horsemen (“tropeiros”) to the center of the country as a supply for the miners of that region (Barbosa, 1978).

In 1870, the European colonization of the region begins. The Italians settle in, mostly between the River Caí and the Campos de Vacaria, on the mountain hillside regions, where they developed a subsistence economy based on agriculture and artisan manufacture; the horsemen (“tropeiros”) soon began to trade with them (Giron, 1977).

The foundation of cities nearby, such as Caxias do Sul and Antônio Prado, favored the opening of new roads, and as a consequence trade across the region intensifies. The Italians were also responsible for the opening of “carrigeable” roads and for the introduction of the “trio cart” (a cart pulled by three mules), which had been used before only as a means of transportation inside the ranches (“estâncias”) of the Campos de Cima da Serra (Barbosa, 1978; Ribeiro and Pozenato, 2005).

With open ways and known roads, a new cycle of “tropeirismo” (transportation of goods and livestock by horsemen) begins. Mules served as a means of transportation for the surpluses produced in the ranches. The surpluses of the system, which were carried in “bruacas”^{*} by mules, comprised cheese, hides, horse-hair, and “pinhão”^{**}, and were traded for salt, sugar, cassava flour, starch, wire, fabric, and “cachaça”^{***}. The travellers also brought products from the coastal regions - “rapadura”^{****}, cachaça, fish, cassava flour and starch – to the mountain hillside colonies. In the colonies, these products were exchanged for

* “Bruacas” were rawhide traveling bags used on horseback.

** “Pinhão” is the edible pine seed of the native araucaria tree.

*** “Cachaça” is a sugar cane brandy.

**** “Rapadura” is a candy made of raw brown sugar from the sugar cane.

salt, sugar, wheat flour, wine, saddles, machines for roasting coffee, guns, umbrellas, etc. The trade relations happened mostly without the use of currency, goods were directly exchanged for goods (Barbosa, 1978).

THE PRODUCT

Barbosa (1978), one of the few sources that directly refers to the Serrano Cheese, describes the beginning of its production as coinciding with the beginning of the colonization of the Campos de Cima da Serra by the “tropeiros”. As soon as wild cattle was tamed, some cows were selected for providing milk for the ranches. Cheese production was a way of using up the milk, which was then consumed inside the ranches themselves. The practice, which was widespread in the region, turned the Serrano Cheese production know-how into a regional commodity, and the cheese itself becomes, with the advent of the “tropeirismo”, a means of exchange and a reserve. Link, López e Casabianca (2006) attribute to the symbolic value that the cheeses can have this function of a “quasi-currency”.

The arrival of the European immigrants to the region from 1870 onwards intensified the exchanges and made the product well-known. However, the Serrano Cheese already had some reputation. There are no documented references to the characteristics of the cheese, only to the fact that it was already abundant and well-known.

Analyzing the Serrano Cheese as a process, what sets it apart is the use of bovine races that are not specialized in milk production. These animals are in general the outcome of the inter-breeding of bovine races specialized in the production of beef, since the main goal of the producers was the selling of calf aging between 8 and 18 months, which would then be “finished” elsewhere, before slaughter. These “cross-breeds” are preferred on

account of their rusticity, which renders them more resistant to the cold spells and grass deficits of the winter. The animals are mostly fed native grasses, which grow naturally in the summer, and in general have their diet complemented in an area of non-native grasses during winter.

The milk that is obtained in this system is rich in fat for two reasons: the kind of animal that is used, which naturally produces less milk but with a higher fat content, and the diet, which is based on the consumption of fibers and thus determines a higher fat content due to the metabolic processes that characterize the ruminants. One must still take into account the taste of the milk, i.e., its sensorial qualities, which is also influenced by the composition of botanical species that grown in the region.

Cheese production occurs in each individual property, and the rancher is the one in charge of making it happen, a task which is shared by couple that owns the property. Cheese production usually takes place in a wood-made room, located by the main house, or by the barn where the cows are milked. Cheese production begins immediately after milking, which happens once a day, early in the morning. Curd is added to the milk while it is still warm. Since the milk is not pasteurized, it maintains a microbiological profile that, according to Souza, Dalla Rosa and Ayub (2003), is responsible for the specific odor, taste and texture of the Serrano Cheese.

Although there can be variations in the cheeses, precisely because of its artisan style, low-scale production located in units distributed throughout the whole territory, “the techniques used in the region, passed on by tradition, maintain a certain uniformity which is reflected in the taste of the cheese” (Ribeiro and Pozenato, 2005, p. 207). A research in which six batches of Serrano Cheese were analyzed – of which three were matured in the summer and three in the winter – also indicated homogeneity among the samples in regards to their

physic-chemical and microbiological traits, independent of the season of the year (Souza, Dalla Rosa and Ayub, 2003).

Back when the Serrano Cheese was carried by “tropeiros” to the places where it would be exchanged for other goods, the cheese had various sizes and shapes. They were made on round molds and weighed up to 20 kg, which allowed for a long maturing time, which ranged from 2 and 6 months. The size of each cheese and its maturation time were due to the form of commercialization. The journeys on horseback carrying the products of the Campos de Cima da Serra in order to exchange them for other goods in towns on the mountain hillsides or on coastal regions of Rio Grande do Sul and Santa Catarina were long and expensive. Therefore, the ranchers would organize only two “tropeadas” per year.

Nowadays, the rectangular shape prevails, the size varies, but the cheeses have between 1.5 and 3 kg each. Maturation time for each cheese takes up to 20 days. The change in the shape of the cheese can be seen as an innovation, given that, according to the producers, the consumer prefers the square mold, so as to render easier its use in the preparation of certain foods, such as sandwiches. The smaller size is also a strategy for making commercialization easier, given that large cheeses are harder to sell because of their higher price tag.

CONCLUSION

The Serrano Cheese is a product defined as a territorialized patrimony *par excellence*, since it conveys in its sensorial qualities the peculiarities of the natural environment, as well as a specific, localized know-how. It is a product related to agricultural practices that relate to the history of the natural environment of the Campos de Cima da Serra.

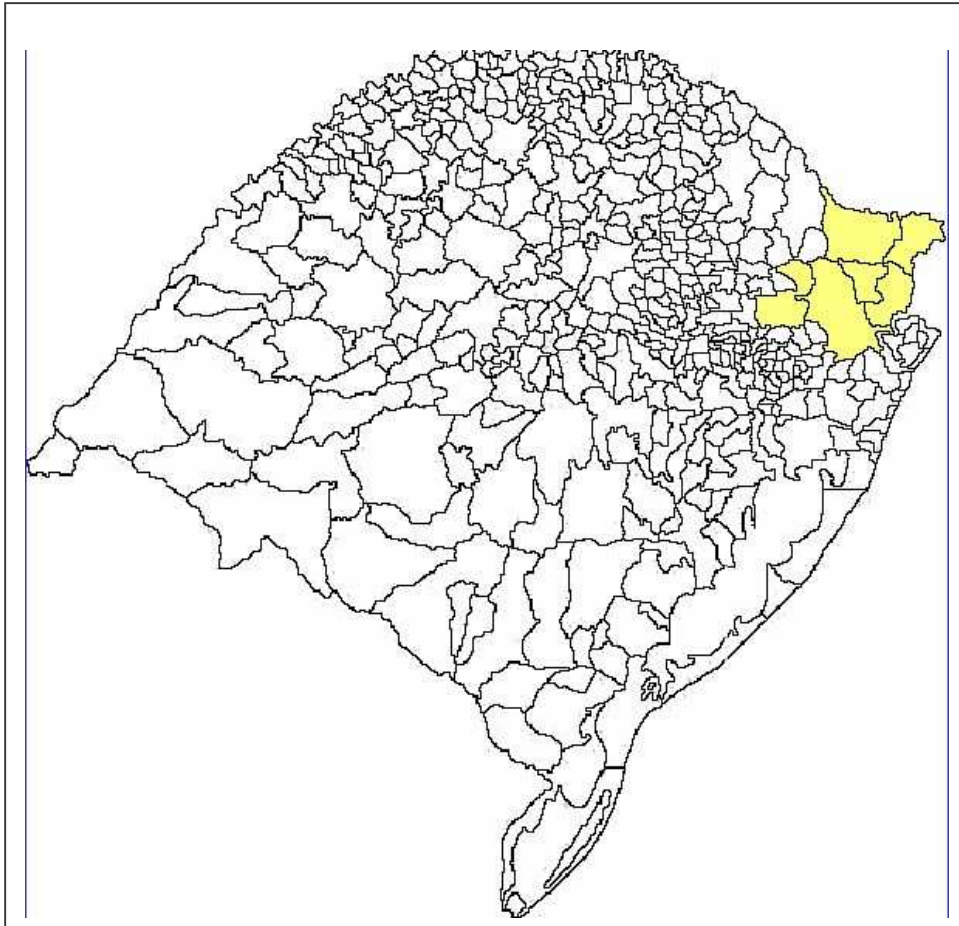
The production of the Serrano Cheese has had a growing economic significance in the composition of the income of the family properties that produce them, without, however, having replaced or modified the system of extensive cattle raising that still prevails in most of the family businesses. The individual property units present a peculiar form of organizing their micro-economy: property expenses are paid for by the selling livestock, whereas providing for each family's needs seems to be dependent on the commercialization of the Serrano Cheese. Therefore, cheese production represents a productive strategy aiming at making viable the family business of cattle raising in the Campos de Cima da Serra. There is a concern because the product is informally produced, and the milk used is not pasteurized and thus violates the norms set out in the municipal health laws to which the agro-businesses of the municipality are subject.

In regards to the manufacturing processes of the Serrano Cheese, they have been kept practically unaltered in the traditional production systems.

The alternative for the survival of the Serrano Cheese is its characterization and protection by means of systems of quality and origin certification, which would relate the product to the historic and cultural elements connected to the territory. This process will yield positive responses, since it would allow for the conservation of the local culture, of the ecosystem, and of a unique way of life, thus favoring other economic activities, such as tourism, which rely on the natural beauty of the environment as an attraction.

BIBLIOGRAFIA

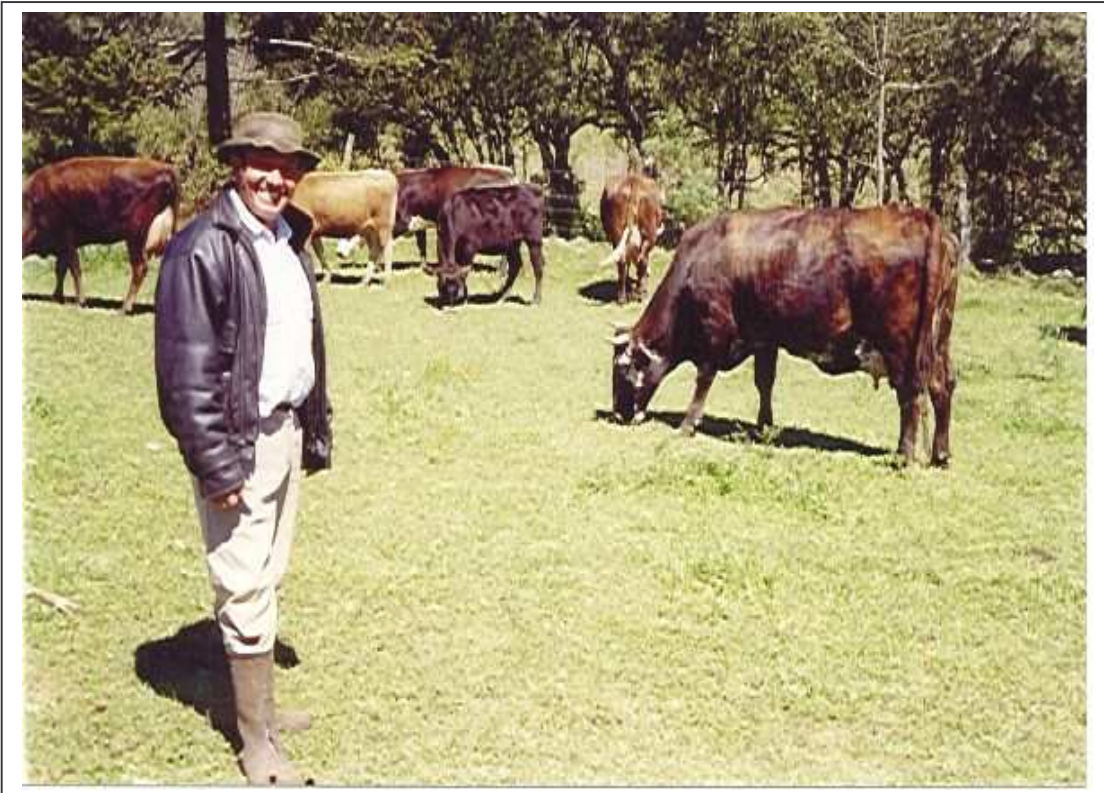
- AMBROSINI, Larissa Bueno. **Sistema Agroalimentar do Queijo Serrano: Estratégia de Reprodução Social dos Pecuaristas Familiares dos Campos De Cima Da Serra – RS.** Dissertação (Mestrado Em Desenvolvimento Rural). Faculdade de Ciências Econômicas da UFRGS. Porto Alegre/RS- BRASIL.2007.
- BARBOSA, Fidelis Dalcin. **A História do Rio Grande do Sul.** Porto Alegre: Edições Est, 1995.
- BARBOSA, Fidelis Dalcin. **Vacaria dos Pinhais.** Porto Alegre: EST / Caxias do Sul: UCS, 1978.
- EMATER (www.emater.tche.br) Envio de informações e dados sobre pecuária familiar nos Campos de Cima da Serra. 15 de maio de 2005 e 01 de outubro de 2006.
- FLORES, Moacyr. **Colonialismo e Missões Jesuíticas.** 2.ed. Porto Alegre: Nova Dimensão, 1986.
- GIRON, Loraine S. **Caxias do Sul: Evolução Histórica.** Caxias do Sul: Prefeitura Municipal de Caxias do Sul/UCS, 1977.
- LINK, T., LOPEZ, EB., CASABIANCA, F. La Calificación de los Alimentos como Proceso de Patrimonialización de los Recursos Naturales. In: MACÍAS, A.A et al. (org.).
- MOHRDIECK, Karl Heinz. Formações Campestres do Rio Grande do Sul. In: **Campo Nativo e Melhoramento.** Esteio: Federacite IV, 1993. p.11-23.
- RIBEIRO, C.M.P.J e POZENATO, J.C. **Fronteiras sem Divisas,** Aspectos históricos e culturais da UHE Barra Grande. Caxias do Sul: Educus, 2005
- RIES, J.E., MESSIAS, L.G.P. **Campos de Cima da Serra, Caracterização da Região e do Pecuarista Familiar.** Porto Alegre: EMATER, 2003. CD-Rom.
- SOUZA, C.F.V., DALLA ROSA, T. e AYUB, M.A.Z. Changes in the Microbiological and Physiochemical Characteristics of Serrano Cheese During Manufacture and Ripening. **Brazilian Journal of Microbiology**, n.34. p. 255-61, 2003.



‘Campos de Cima da Serra’ regions in south Brazil



São José dos Ausentes –l landscape of the “Campos de Cima da Serra”



Portuguese Etnia - producer of Serrano cheese and typical cattle that produces milk to make Serrano cheese



Artisan Serrano Cheese- São Francisco de Paula-RS



Serrano Cheese with 150 Kg

Christian Party (Festa do Divino), district of Criúva, in Caxias do Sul- RS