
Economics of Goat and Ewe Milk Cheeses with Protected Designation of Origin in Europe

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Introduction

We present an overview of the added-value created by Protected Designation of Origin (PDO) labelling scheme for goat and/or ewe milk cheeses in Europe through literature review. A food product wearing the *Protected Designation of Origin* (PDO) label has an original trait, strictly related to its area of origin, this trait is not reproducible outside this area. A PDO food product is produced and processed and prepared in its area of production and benefits from a long lasting good reputation. The PDO labelling scheme is based upon the peculiar combination of pedoclimatic conditions and local know-how which makes the product unique and original. The PDO label is a guarantee of origin and protects the collective brand name against fraudulent naming of PDO-like products coming from nowhere, such as Feta-like industrial cheese.

Literature review

The first salient feature is the increasing importance of goat and ewe milk when moving from overall milk EU production to PDO registered cheeses. PDO is a quality labelling scheme which quite addresses the goat and ewe milk cheeses local supply chains. Goat and ewe milk is a minor issue for Europe wide milk production. While the volume of PDO cheese made with goat and ewe milk is relatively small, the share of PDO into this production is quite significant in southern European countries. Goat and ewe milk PDO cheese is also produced in some northern European countries. It is often noticed that PDO cheese market's share is globally low but can be locally high according to the presence of at least one big city close to the area of production. As any PDO product is considered as a cultural marker of local heritage, urban consumers are prone to keep links to their culture by eating locally rooted food.

However, all scientific publications, focusing on consumption of PDO food products, pinpoint the low frequency of this specific consumption. Facing this porous purchasing behaviour, the farmers, processors and retailers, are able to get value through price premium which is the usual figure in the PDO landscape. Although none systematic study is monitoring price of PDO cheeses compared to other goat and ewe milk cheeses, it was found, here and there, that the price premium of PDO vs. non PDO cheese is sizeable. PDO price premium compared to non PDO substitute is roughly +50% on end market and +20% at farm gate. The price of PDO cheeses is also less volatile. It is worth considering that forthcoming scarcity of goat and ewe milk, may affect this premium by increasing the volatility of milk, giving the opportunity, time to time, of price increase at farm gate, without the help of PDO scheme.

Another important dimension of the added-value brought by PDO labelled cheeses is their role as a benchmark for biodiversity preservation. Studies are unanimous to describe and analyse how PDO scheme is a good framework for biodiversity preservation in terms of local breeds, grass species for pasture, cheese making

process or organoleptic quality and diversity. However, not all the codes of practices of the different goat and ewe milk PDO cheeses mention an one-to-one anchoring to local breed, according to the usual low yield of local breeds for milk production. It was also found that there is a clear trade-off towards value instead of volume in the PDO supply chains. PDO labelling scheme has stringent rules for rearing or cropping, producing and processing methods, especially with respect to area of procurement of raw material. Ripening duration is often long for PDO cheeses and frequency of milk collection, when processed in dairy, is high for PDO.

Discussion

The list of duties included into the specifications of any PDO labelling scheme, operates as a limiting factor of volume by introducing bottlenecks on workload. The mandatory grazing, the high frequency of milk collecting tours, the persistence of handmade tasks during the cheese making process, the long ripening period, lead to a high labour intensity in the PDO cheese production chain. The PDO scheme clearly acts in favour of preservation of local employment in rural remote areas.

The stringency of codes of practices and specifications of each PDO cheese is the core strategy for efficient management of scarce resources leading to profitability related to top quality. The specific rules of breeding, rearing, feeding, processing, ripening work together towards uniqueness and act as limiting factors of volume produced in order to organize scarcity. Consequently, they allow a monopoly effect on the market by introducing a price premium accepted by consumers. The willingness to pay this premium is positive from local consumers, mostly the urban ones, and from the connoisseurs, able to strongly like the given PDO cheese according to their familiarity or expertise. However, outside the region of origin, the monopoly effect is less acting as the level of knowledge about the relevant product is lower. The market power of PDO decreases according to the distance from the region of origin.

Moreover, sometimes considered as unsure with respect to food safety due to the use of raw milk in most of cases, PDO cheeses are often not easy to market far from their region of origin. The counterpart of increased market power of PDO labelled food products is the high commitment of stakeholders along the supply chain in order to preserve the unique quality at any stage of the distribution chain.

The limitation of volume benefits to farmers, as the key issue is to keep the raw material under control. The deployment of such endeavour enhances the capability of farmers to cope with the work load related to PDO scheme enforcement. Some studies pointed out that farms' resilience, instead of growth, is one major result of the PDO labelling scheme. Goat farming system under PDO labelling scheme is not leading to growth, because growth means going into intensive scheme including heavy constraints. Small farms are more resilient under the PDO scheme.

Conclusion

The use of PDO labelling scheme for goat and ewe milk cheeses in Europe provides elements for economic long term resilience of cheese local supply chains. This is particularly established towards sustainability of small dairy farming systems including small farms and artisan dairies. However, the supposed lighter environmental footprint of PDO production process is not measured yet.

PDO labelling scheme fits well with small scale of production, albeit sometimes used at factory scale. The aim is to pay attention enough to value instead of growth. This objective is successfully reached through the compliance of stringent codes of practices, which allows in turn at claiming for higher price premium, strongly justified by higher quality of products issued from the PDO supply chain. The acknowledgement and acceptability of this price premium is easier in locally rooted markets, with some exceptions in export.

Last, but not least, PDO scheme helps the spread of value along all the supply chain, by giving stronger market

power towards farmers, while it is mostly captured by downstream stakeholders in non-certified supply chains. The ability to get value and consequently the resilience of small farms is the main issue of PDO scheme towards goat and ewe milk cheese, by providing top ranked quality and specialty cheeses.

These results should be enhanced by screening greek data, which are not available at EU level.

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