



**MOVING**  
MOUNTAIN VALORISATION THROUGH  
INTERCONNECTEDNESS AND GREEN GROWTH

**Policy Brief**

# CORDILHEIRA CENTRAL | Serra da Estrela PDO Cheese



Photo credit: Teresa Pinto-Correia



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# Cordilheira Central: Serra da Estrela PDO Cheese

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## Summary

Cordilheira Central is a mountain range, which crosses the centre of the Iberian Peninsula. In Portugal, its maximum altitude is reached at Serra da Estrela (1 993 m) where Serra da Estrela Protected Designation of Origin (PDO) Cheese is made. This traditional cheese is made with milk from two autochthonous sheep breeds in small- to medium-scale cheese production plants. It is directly interconnected with two other PDO products, namely Cottage Cheese and Lamb, and with Burel (a wool fabric).

Nowadays, the value chain (VC) of [Serra da Estrela PDO Cheese](#) is facing important challenges, such as the reduction in the number of shepherds and the increase in the number of animals of non-autochthonous sheep breeds, as many shepherds perceive the latter as more profitable.

At this preliminary stage, some potential critical links in the policy debate were identified.

**Know more about the Cordilheira Central Reference Region**, its selected value chain and the regional multi-actor platform (MAP), [here](#).

## Key policy messages

- Value shepherds and provide support to breeders.
- Support autochthonous sheep breeds.
- Create strategies to achieve value chain independence from imported feed.
- Make public aware of the distinction between PDO Cheese and non-PDO Cheese.
- Involve local common's associations in the management of pastures.
- Improve communication and integration among public organisations.



## 1. The Mountain Reference Region (MRR)

Cordilheira Central is a mountain range, which crosses the centre of the Iberian Peninsula longitudinally and reaches its highest altitude at Pico Almanzor (2 592 m), located in the Sierra de Gredos (Spain). In Portugal, its highest point is located at Serra da Estrela (1 993 m). It is mainly covered by 'Shrub and/or herbaceous vegetation associations' and 'Forests' according to CORINE Land Cover 2018 (European Union – Copernicus Land Monitoring Service, 2018). Grasslands, alone or in mosaics, are the more represented land systems in this Mountain Reference Region (MRR) (van Assenlen and Verburg, 2012; Levers et al., 2018), and are an essential resource for the [Serra da Estrela PDO Cheese](#) value chain (VC). Other VCs are also relevant in this MRR, and are closely linked to the cheese as they are also derived from the sheep, namely Burel fabric (made from wool), lamb, and cottage cheese. Furthermore, there is the VC of nature tourism, which takes advantage of mountain forests, grasslands, landscape and culture.

## 2. Serra da Estrela PDO Cheese

Serra da Estrela PDO Cheese is a traditional sheep's cheese made using the milk from autochthonous sheep breeds (Bordaleira da Serra da Estrela and/or Churra Mondegueira), thistle flower (*Cynara cardunculus*) and salt, according to traditional knowledge of cheese manufacture techniques passed down from generation to generation. This cheese is highly characteristic of the region where it is produced, and is highly connected to land use. Animals may feed from two types of local pastures: (i) natural pastures – made up of spontaneous vivacious grasses; and (ii) cultivated pastures – constituted by white clover and underground clovers. However, simple or compound food can be used to reinforce the diet, especially at the beginning and end of pregnancy and at the peak of lactation. Currently, in the geographical production area of Serra da Estrela PDO Cheese, there are 27 small- to medium-sized PDO Cheese production plants, about 125 dairy farms producing Bordaleira da Serra da Estrela and Churra Mondegueira milk and a cheese producers cooperative – [EstrelaCoop](#) – which is mainly dedicated to technical assistance to members and to the defence of the Protected Designation of Origin – Serra da Estrela. Sheep breeders mainly work on their own and the associations are used mainly to provide the required administrative support. Therefore, the negotiation power of sheep breeders, in relation to the price of milk, wool and meat, is weak.

Most sheep breeders deliver milk to companies who produce the PDO Cheese (and PDO Cottage Cheese), as well as delivering wool to other buyers, and lamb to others. This VC is therefore directly interconnected with two other PDO products – Serra da Estrela PDO Cottage Cheese and Serra da Estrela PDO Lamb – and with Burel fabric (made from wool exclusively from the Bordaleira da Serra da Estrela sheep breed) – but only at the production level and at farm scale. Further down the value chain there is no connection. Nor is there any intervention of public authorities or private companies to better link the different value chains.

### **3. Value chain contribution to sustainability and resilience of the Mountain Reference Region: barriers and opportunities**

Serra da Estrela PDO Cheese is a product linked to territorial identity that uses endogenous resources, namely, local pastures, both lowland and mountain pastures, and autochthonous sheep breeds, as well as local knowledge on sheep breeding and cheese making. Even though these characteristics may be linked to the sustainability and resilience of mountain land use systems, this VC is facing important challenges and there seems to be a lack of a territorial approach that could better link the use of resources, the VC and associated VCs, as well as other VCs profiting from the preservation of biodiversity and the landscape, such as the tourism VC. Today, the number of shepherds is decreasing, as this job is often seen as unattractive, due to being physically demanding (in sometimes harsh weather conditions) and leading to low wages. Also seriously affecting the resilience of the VC is the lack of advice targeting shepherds, as well as the low level of collective organisation, leaving each shepherd isolated. Moreover, even though autochthonous breeds are more adapted to the territory than introduced ones (e.g. Lacaune or Awassi), and the only ones to produce the milk which can be transformed into the PDO Cheese, the latter are increasing in number as they, on average, produce more milk and many shepherds have the perception that they are more profitable. Additionally, although sheep graze local pastures, they also receive feed, for example, during milking. Therefore, the sustainability of feed imports into the system must be further investigated.

### **4. Policy relevant considerations**

At the beginning of the value chain analysis, some potential critical links in the policy debate were identified:

- Value shepherds as landscape managers and biodiversity protectors and promote the use of highland pastures to preserve priority habitats.
- Provide detailed technical and administrative support to breeders, both from the production side as well as from the natural resources side.
- Support autochthonous breeds to the detriment of introduced ones.
- Create strategies to achieve value chain independent of imported feed.
- Make the public aware of the distinction between PDO Cheese and non-PDO Cheese (made with milk from other breeds or imported).
- Create higher involvement of the managers of the commons, the local common's associations, in the management of pastures; these associations have a key role in the region as managers of forestry areas and preventing fire risks; however, they do not interfere with grazing areas, if not specifically asked to do so by shepherds, and as such a large share of the former grazing areas register scrub encroachment and cannot be used for grazing nor as an eco-tourism asset.



- Better communication and integration among the public organisations of the different sectors: farming, forestry and nature conservation, tourism and hiking.

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