



MOVING
MOUNTAIN VALORISATION THROUGH
INTERCONNECTEDNESS AND GREEN GROWTH

Policy Brief

SWISS JURA | Tête de Moine PDO cheese



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Swiss Jura: Tête de Moine PDO cheese

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Summary

Tête de Moine cheese production represents an emblematic product of the Jura massif, helping to maintain milk production and the fabric of the region. The value chain has been able to organise itself and mobilise its territorial resources to form a controlled designation of origin, and to bounce back from the constant fall in the price of milk that Switzerland has experienced since the 1990s. It has made it possible to offer a reasonable price for milk and thus maintain the use of pastures and woodlands by cattle livestock.

Today, the Tête de Moine value chain faces other threats such as the maintenance of woodland pastures and fodder production as well as its high dependency on public support linked to the [Swiss Agricultural Policy](#).

More policy support for better environmental integration in Protected Designation of Origin (PDO), as well as the promotion of diversification at farm and territorial level, is therefore needed to increase the resilience of cheese production and dairy farmers.

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

Key policy messages

- Economic resilience
- Extensive pasture
- Consideration of the environment directly at the inter-professional level
- Recognise the importance and accentuate research of wooded pastures

1. The Mountain Reference Region (MRR)

The Swiss Jura is a medium-altitude mountainous region, culminating at 1 720 m above sea level. It consists of five cantons - Vaud, Neuchâtel, Jura, Bern and Solothurn - and it shares a large border with France, where the Jura massif continues. The Jura massif has a long tradition of artisanal and industrial production. Indeed, the region has been industrialised since the 18th century, specialising in the luxury watch industry, particularly in *La Chaux-de-Fonds* and the *Vallée de Joux*, and in the machine industry in the Bern and Jura canton. The Swiss Jura has experienced strong de-industrialisation, but has managed to rebound and maintain its high-quality watch production, based on its human and organisational resources.



The Jura is mainly composed of limestone, which has difficulty retaining water and can experience droughts when rainfall drops. To compensate for this, rain falls abundantly (1 000 to 2 000 mm/year) and this is distributed more or less evenly throughout the year. It is mainly covered by forest, pasture, wooded pasture and arable land, creating a landscape mosaic specific to the Jura as well as a heterogeneity that is beneficial for biodiversity. This Mountain Reference Region (MRR) is therefore particularly vulnerable to fluctuations in rainfall or high temperatures and has already experienced severe summer droughts affecting pastures and forests, with a high loss of fodder production and the death of many trees. Several regional nature parks are present in the MRR with the aim of preserving the ecological, cultural, historical and economic wealth of the region.

2. Resilience and innovation

The Mountain Reference Region's main agricultural production is cattle milk production, in line with Swiss mountain agriculture, where the slopes prevent all other agricultural production. Indeed, 70% of Switzerland is covered by mountains (Alps and Jura) and 70% of its useful agricultural area is pastureland (Confédération Suisse, 2017). Livestock and the derived products such as milk, cheese and meat are therefore of major importance to Swiss agriculture. Overproduction of milk led to the introduction of a milk quota in 1977, which was abolished in the 2007 Agricultural Policy. Since the 1990s, the price of milk has fallen steadily, no longer covering the production cost and forcing many farmers to abandon production. To compensate for the difference between the sale and the production price, Swiss farmers can rely on the system of direct payments, which are subsidies that represent about half of their income, to compensate for their protection of the rural landscape, the environment and biodiversity. Agricultural production and income are thus decoupled, which changes profoundly the role of farmers (Barjolle, 2010).

Faced with the loss of yield due to climate change, the opening of markets with Europe, demographic and economic growth and the increasing scarcity of fossil fuels, production costs are constantly increasing. Switzerland cannot compete with the European market because of its geomorphology and its high cost of living. In addition, there is a duopoly in Switzerland between the two largest retailers (Migros and Coop) who apply high profit margins and strongly influence the pressure on milk prices. Cheeses with a PDO, such as *Tête de Moine*, have helped to secure a better milk price for the farmer and have long been seen as a solution to the milk crisis. This hard cheese is a niche product of high quality, thus justifying its label and relatively high price. It is a unique product because it is consumed with a *girolle* (invented in 1970), which cuts the cheese into a very thin slice resembling a rose ("La filière tête de moine AOP", n.dd). This innovation led to a strong increase in sales and production and made it possible to register the product as a luxury and high-quality product. The value chain currently generates 370 jobs in the region and has an annual turnover of 70 Millions Swiss Francs, feeding into the regional economic. The *Tête de Moine* value chain is organised from the *interprofession*, which manages



the quality and volumes produced by assigning upstream production volumes to the milk producers, the cheese factories and the refiners. There are nine cheese factories and two refiners, which are part of the two largest cheese factories. Refining requires significant infrastructure and investment which implies an imbalance of power between the two large cheese factories, on which the smaller ones depend. The *interprofession* is also responsible for managing the PDO, with quality control, and promoting sales. About 60% of the production is exported, mainly to France and Germany, which implies a high dependency on the European market and the Euro-Swiss franc exchange rate. The economic crisis of 2008 and the fall in the exchange rate in 2015 significantly reduced exports. The *Tête de Moine* production is strongly linked to *Gruyère*, another major PDO Swiss cheese, to compensate the seasonal mismatch between production and consumption (Magnan, 2015).

3. Value chain contribution to sustainability and resilience of the MRR: barriers and opportunities

Due to its quality, its innovative character and its PDO label, *Tête de Moine* is perceived as a resilient value chain, especially in economic terms. Indeed, it is highly organised and supported and has many legal and organisational tools at its disposal to limit the effects of market liberalisation and the fall in milk prices. Farmers receive four types of economic support: direct payments, support for milk processed into cheese, support for milk produced without silage, and an income per hectare for PDO value chains. This sector is therefore extremely well supported but is also highly dependent on this funding, which could weaken its resilience if funded changes. The economic success of the PDO cheese value chains has led to an intensification of extensive pastures and wooded pastures, thus calling into question the sustainability of these value chains. Moreover, there is an uncertainty about the evolution of forage production due to climate change. Wooded pastures could limit the effects of droughts through the shade of the trees, maintaining moisture. On the other hand, increasing summer droughts seriously undermine the health of trees, thus weakening the resilience of this land use system and of the *Tête de Moine* value chain which depends on it (Buttler et al. 2012). This decrease in forage production could lead to an increase in nutrient imports, but also to an intensification of grassland use with a negative impact on biodiversity. There is also uncertainty about the health of animals in the face of rising temperatures.

PDOs may have been a temporary solution to increase the economic resilience of dairy farmers facing the milk crisis, but this form of organisation remains vulnerable to climate change and is highly dependent on support from Swiss agricultural policy and the European context.



4. Policy relevant considerations

The *Tête de Moine* value chain has made it possible to cope with the milk crisis in the Swiss Jura, by better remunerating dairy farmers and ensuring that their production is sold. In the face of the current climate crisis and the intensification of pastures, efforts to preserve this land use must be made. We suggest including a better consideration of the environment directly at the inter-professional level. In its vision 2035 for mountain regions, the Swiss Association for Mountain Regions (SAB) invites regional actors to strengthen collaboration, to identify and exploit development and innovation potentials and to proactively shape the processes of change (Kadelbach, 2019). A response from regional stakeholders such as the interprofession could be a first step towards adaptation to present and future threats.

At a higher level, such as cantonal or federal, policies should also give a special status to woodland pastures, firstly to recognise their importance, and secondly to accentuate research for a better adaptation to climate change, such as diversifying the tree species. To limit the dependence on public support and exports, policies should also promote diversification, innovation and short supply chains. Indeed, the diversification of agricultural activities directly on farm, such as through the development of agri-tourism or the promotion of other agricultural products, could limit these dependencies and thus increase resilience.

Reference

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