

RUMINANT LIVESTOCK FARMING AND THE TRADITIONAL HERITAGE



«How does ruminant livestock constitute a traditional heritage?»

1

The diversity of ruminant breeds constitutes a remarkable genetic heritage, preserved thanks to ruminant farming and actions to preserve this diversity.

This irreplaceable heritage allows both adaptation to different territories and different farming methods and offers a wide range of quality products that are part of French gastronomic heritage.

2

Livestock farming is crucial for preserving traditional crafts: while providing essential raw materials, it maintains traditional practices such as transhumance. Now recognized as an intangible cultural heritage of humanity, the latter embodies ancestral knowledge and rituals related to pastoral farming, strengthening cultural identity and social bonds in rural communities.

3

The protections enjoyed by certain ruminant livestock products under official quality and origin designations (PDO, CDO, STG, other designations) highlight their heritage role.

Traditional production methods, specific expertise, defined geographical areas and distinctive product characteristics are thus recognized and protected.

4

Ruminant livestock confers heritage value to landscapes, encouraging their preservation for their cultural and historical significance. Examples such as the Grands Causses and the Cévennes, recognized by UNESCO, illustrate this enhancement of landscapes related to agropastoralism. National and regional classification initiatives, such as Regional Natural Parks in France, demonstrate the desire to preserve these landscapes, essential to territorial attractiveness.

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WHAT ARE WE TALKING ABOUT?

For centuries, landscapes and lifestyles have been shaped by agricultural practices. Ruminant farming holds an essential place there and provides the territories with their own unique identity. The multiple facets of the richness of the heritage related to ruminant livestock farming encompass a variety of tangible and intangible elements. This heritage stems from the diversity of ruminant breeds, pastoral traditions, expertise and cultural landscapes – dependent on pedoclimatic conditions – associated with them, at different scales of the territory. It also finds its essence in culinary practices, dishes and products derived from livestock farming, as well as in crafts that enhance these products, whether they are intended for consumption or other uses such as leatherwork, wool processing, horn crafting, etc. (Dumont *et al.*, 2019).

1

Breeds

The breeds of ruminants, a remarkable genetic heritage to preserve

The diversity of ruminant breeds that we have managed to preserve in France represents a remarkable and irreplaceable genetic heritage. Thus, 54 bovine breeds, 59 ovine breeds and 11 caprine breeds make up the ruminant herds in France. This diversity offers a multitude of zootechnical aptitudes, which allows us to meet the needs of farmers, according to different production conditions, different territories and pedoclimatic contexts, as well as the specific needs of the agri-food industries and the markets.

However, the significant development of agriculture after the Second World War led to a preference for breeds specialized in meat or milk production, exposing some other breeds to the risk of extinction. Consequently, by the late 1960s, some breeds numbered only a few dozen animals. Preservation actions were launched as early as the 1970s, with the first conservation programs for breeds with very low numbers in 1976 for the Breton Pie Noir and Flemish breeds. Since then, the profession, agricultural and livestock research stakeholders, regional parks and conservatories, seed production centers, etc. have been coordinating to develop these breed conservation programs and enable them to develop economic valuations.

Since 1999, a national cryobank has been preserving the genetic material of livestock species, and since 2015, an observatory for the genetic variability of ruminants and equids has been established.

The richness of genetic diversity, key to adaptation, production and tradition

Maintaining the genetic diversity of livestock allows for (i) adaptation to different environments, climates and available resources of the territories, (ii) adaptation to different livestock production methods, and (iii) providing a wide range of typical products, both food (cheeses, meats) and non-food (leather, wool, etc.), that are part of French heritage.

A crucial challenge to ensure the sustainability of farms, concerns the preservation of a genetic reservoir for future needs. Indeed, the ability to adapt to changes in farming conditions, particularly those related to climate change, partly depends on the genetic diversity of the animals. The objective is to preserve beneficial characteristics at the population level to adapt to future conditions. The genetic abilities of rustic breeds, adapting to the constraints of certain environments, are important assets, brought to the forefront today (Idele, 2016; Danchin-Burge *et al.*, 2000; Verrier *et al.*, 2015; Jacques *et al.*, 2024).

The implication of breeders and sectors in the conservation of the diversity of breeds

In France, various means are implemented to enhance the value of livestock populations. The official quality marks awarded to certain food products encourage farmers to raise animals of the breeds recommended in the specifications of these products. For example, the PDO (Protected Designation of Origin) is often linked to specific breeds, which helps preserve products, expertise and emblematic landscapes. The PDO can sometimes concern local breeds with small populations, but more often it involves more widespread local breeds that are not considered to be in danger of extinction.

The breeders are also exploring more individualized approaches to enhance the value of their productions by focusing on the management of breeds with reduced populations, as illustrated by the VARAPE project (Couzy *et al.*, 2017). They prioritize direct marketing and get involved in all stages of processing and marketing, from breeding to selling the products. A concrete example is that of the breeders of the Breton Pie Noir cow, who market the majority of their production through direct sales.

KEY FIGURES

The domestication of sheep and goats, then cattle and horses, gained momentum around **10,000 BC** (Rieutort *et al.*, 2014).

In France, **54** bovine breeds (including **32** local breeds), **59** ovine breeds (including **46** local breeds), **15** caprine breeds (including **11** local breeds) (Idele, 2022).



2

Traditional crafts

Livestock farming is of paramount importance in preserving traditional crafts

Livestock farming plays a fundamental role in the preservation and perpetuation of traditional crafts. These crafts, often inherited from past generations, are deeply rooted in the history and culture of local societies. Livestock farming provides essential raw materials for many artisans and traditional producers. For example, sheep farming provides wool to textile artisans, while cheese producers depend on the milk provided by ruminant farmers. Moreover, traditional crafts related to livestock farming, such as transhumance or the artisanal production of livestock-derived products, are important for the local economy of rural areas, thereby contributing to the preservation of rural life and cultural identity. Thus, livestock farming is of paramount importance in preserving traditional crafts, ensuring their continuity and safeguarding the cultural and economic heritage of communities over time.

The products from this traditional heritage are often emblematic of French craftsmanship recognized abroad. Leather has embodied exceptional craftsmanship in France for centuries, carrying ancestral expertise passed down from generation to generation. Renowned for its quality, French leather is not only used in the production of iconic products such as luxury handbags, but it is also an international symbol of prestige. Similarly, French cheeses, with their diversity and richness of flavour, are gastronomic ambassadors of French culinary heritage, conveying authenticity and refinement around the world.

Transhumance: intangible cultural heritage of humanity

The practices and knowledge related to pastoralism are increasingly recognized. Transhumance was recognized as Intangible Cultural Heritage in France in June 2020, then inscribed, in 2023, on the UNESCO list as intangible cultural heritage of humanity. The high-altitude pastoral practices that define it, the customs of collective management of pastoral territories, as well as the expertise related to crafts and food production, are at the origin of the valorisation of these traditions. Transhumance results from a deep understanding of the environment and encompasses social practices and rituals associated with the care, breeding, and training of animals, as well as the management of natural resources. It also includes festive traditions celebrating the departure of the herds for the pastures, such as summer festivals. Furthermore, transhumance promotes social inclusion, strengthens cultural identity and the bonds between families, communities and territories, while mitigating the effects of rural exodus.



LEARN
MORE...

... about livestock jobs

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« Ruminant livestock farming and the farming profession »
and « Ruminant livestock farming and jobs ».

KEY FIGURES

665,422 tons of cheese
exported in 2022
(cow, sheep and goat
cheeses combined)
(CNIEL, 2023).

91% of collective areas
are concentrated
in the Pyrenean
and Alpine massifs
(data from the Ministry
of Agriculture).

In **2020**, in metropolitan
France, **7,800** herbivore
farmers practiced
transhumance
to collective pastoral areas
(data from the Ministry
of Agriculture).



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3

Official labels of quality and origin

Protected Designation of Origin (PDO) and Controlled Designation of Origin (CDO): guarantee of expertise, origin and authenticity

The PDO designates a product whose every stage of production follows a specific recognized expertise, within a defined geographical area, thus giving the product its distinctive characteristics. This quality mark ensures the protection of the product's name in all member countries of the European Union. The AOC designates products that meet the criteria of the PDO and guarantees the protection of their designation on French territory (www.inao.gouv.fr). This certification is granted to products originating from a precisely defined terroir, where the interaction between natural, climatic, physical and human factors gives the product typical and distinctive qualities. It thus guarantees a close link between a product, its terroir, and traditional production and/or processing techniques (according to INAO).



The Red Label: a symbol of quality and terroir for French animal products

The Red Label is a national sign awarded to products whose production or manufacturing conditions guarantee a higher level of quality than that of similar products generally available on the market. Quality encompasses all the properties and characteristics of a product. In meats, the Red Label is historically the most present sign, and it is very often associated with an animal breed (e.g.: Charolais Beef from Bourbonnais, Aubrac Farm Beef, Limousin Veal raised by its mother, etc.) (Fil Rouge (cmre.fr)).

Other quality schemes highlight the geographical origin of the products and specific traditions

The Protected Geographical Indication (PGI) offers consumers the guarantee of the quality and authenticity of agricultural products, highlighting their close connection with their terroir of origin. To qualify for this official sign related to quality and origin (SIQO), at least one step among the production, processing or preparation of this product must take place within this defined geographical area. The Guaranteed Traditional Specialty (GTS) refers to a product whose distinctive characteristics are associated with a composition, manufacturing methods and processing that have relied on a specific tradition (www.inao.gouv.fr). Moreover, other value-added labels are subject to specific labeling. The mention "Mountain products" regulated at the European level, can apply to products manufactured or processed in mountainous areas. The raw materials and animal feed must essentially come from a mountainous area. The terms "Farm processed", "Farm Product" or "Farm Produce" refer to traditional processing methods directly on the farm.



KEY FIGURES

Among the **101** PDO agri-food products, **51** are dairy products (mainly cheeses)
(Data from INAO, 2020).

The proportion of cow, sheep and goat milk used in PDO in French collection are respectively **36.3%**, **12.4%** and **14%**
(CNAOL, INAO, 2023).

In France, PGIs are: **10** cheeses, **1** cream, **35,534** tons of dairy products (2022 tonnage)
(CNAOL, INAO, 2023).

16 Red Label for cattle,
12 Red Label for lambs,
4 Red Label for calves
(www.lavel-rouge-viandes.fr).

3 Official labels of quality and origin

Intangible cultural heritage: an enhancement of traditional products and expertise

Indirectly, the recognition of dietary regimes as intangible heritage influences the products themselves. In 2010, the gastronomic diet of the French was recognized as intangible cultural heritage by UNESCO. The gastronomic meal follows a precise order: it begins with an aperitif and concludes with a digestif. Between these two moments, it includes at least four courses: an appetizer, fish and/or meat accompanied by vegetables, cheese and a dessert. This recognition, for example, reinforces the heritage image of the association of cheeses tasted before dessert. The attention given to intangible cultural heritage highlights artisanal skills related to food production, such as the knowledge of cheesemakers and refiners in the case of cheeses, or butchers for meat products, and recognizes their importance in local culinary traditions. However, these skills are currently threatened because their transmission is not fully guaranteed (Dumont *et al.*, 2019).



KEY FIGURES

The operators involved in PDOs and PGI sectors:
16,186 dairy farmers,
1,314 on farm processors,
384 processing workshops
and **238** maturing
workshops
(CNAOL, INAO, 2023).

LEARN
MORE...

...about the heritage value of food products
derived from livestock farming,

CHECK OUT THE SHEET ➔

« Ruminant livestock farming and the gastronomic heritage ».

4 Cultural landscapes

Ruminant farming provides heritage value to landscapes

The cultural and heritage value of landscapes provided by ruminant farming has led to their protection. In France, many landscapes possess exceptional heritage value. This is particularly the case with the Grands Causses and Cévennes, labeled by UNESCO in 2011 for their cultural landscapes of Mediterranean agropastoralism. Various national and regional classifications can also highlight and preserve landscapes associated with ruminant farming, as demonstrated by certain Regional Natural Parks in France. Protecting these landscapes is all the more important as in an increasingly urbanized society, cultural landscapes represent a key element of territorial attractiveness, both residential and tourist (Dumont *et al.*, 2016).

KEY FIGURE

In France,
more than **60%**
of the surface of the
Regional Natural Parks
is grassland
(Idele, 2021).

LEARN
MORE...

...about the heritage value
of livestock landscapes

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« Ruminant livestock farming and landscapes ».

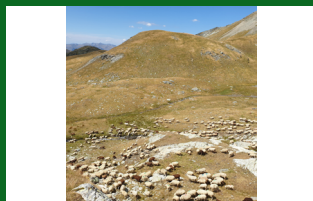


ACTIONS AND TOOLS
IMPLEMENTED BY THE SECTORS**The Pasto UMT**

The Pasto UMT (Unité Mixte Technologique-Technological Mixed Unit) « Resources and transformations of pastoral livestock farming in Mediterranean territories», said UMT Pasto, is a structure of partnerships between research - INRAE, an institute of higher education - l'Institut Agro Montpellier, a technical institute - l'Institut de l'Élevage. Formed in 2015 and renewed in 2020 for 5 years, the UMT Pasto aims to:

- Produce knowledge and methods to support the maintenance and development of livestock farming;
- Facilitate consultation to promote the coordination of pastoralism stakeholders and research and development actions at both national and international levels;
- Contribute to the training of stakeholders in livestock farming and environmental management.

The UMT works on the theme of predation, which is integrated into the first work axis of the UMT, namely, the evolutions of livestock farming systems and pastoral territories in the face of local and global changes.

**Recognition of transhumance as an UNESCO World Heritage**

In June 2020, transhumance was inscribed on the intangible cultural heritage (ICH) of France. In December 2023, Unesco granted it the status of intangible cultural heritage of humanity.

This recognition ensures the preservation of livestock farming techniques and methods of managing mountain herds, as well as the traditions of collective management of pastoral spaces. It also covers the expertise associated with crafts and the production of food products considered a valuable contribution to all of humanity.

**Recognition of the gastronomic meal of the French as an intangible cultural heritage of humanity by UNESCO**

In 2010, the gastronomic meal of the French was recognized by UNESCO as an intangible cultural heritage of humanity. The gastronomic meal follows a precise order: it begins with an aperitif and concludes with a digestive. Between these two moments, it includes at least four courses: an appetizer, fish and/or meat accompanied by vegetables, cheese and a dessert. Among the components of the meal highlighted, there is the careful selection of dishes, reflecting the diversity of French regions and terroirs.

ACTIONS AND TOOLS
IMPLEMENTED BY THE SECTORS**The Fromages de Terroirs network**

Cheese making chains valorizing their terroir (Réseau Fromages de Terroirs) has 13 partners.

Its objective is to promote exchange and the emergence of projects between research and development stakeholders and local cheese sectors. The ambition is to generate projects that meet the needs of the sectors and whose transfer is facilitated.

The network conducts work of interest to operators in cheese sectors rooted in their terroir: raw milk and its microbiota, grassland resource management, traditional expertise, sector sustainability and many others. The current thematic program spans the period 2020-2024 and aims to support, through research and development, cheese sectors that value their terroir and face various changes, such as societal and regulatory developments, technological advancements and challenges related to climate change. The network aims to spark discussions, promote, and preserve the fundamental principles on which these sectors are based to differentiate themselves.

**ADAOPT Project**

The ADAOPT project aims to support sectors under SIQO in adapting to the changing climate.

Six PDO/PGI territories are involved in the program, in order to develop strategies for adapting to climate change for their cheese sector (Camembert de Normandie, Valençay, Mont d'Or, Picodon, Tomme de Savoie and Laguiole). In each pilot territory, a multi-stakeholder working group has been established to reflect on the adaptation strategy to be implemented.

**The quality and origin approaches**

Quality and origin approaches are aimed at protecting and promoting traditional food products, highlighting their distinctive characteristics and/or their connection to a specific region. In particular, these approaches include Protected Designations of Origin (PDO), Controlled Appellations of Origin (CAO), Protected Geographical Indications (PGI) and Guaranteed Traditional Specialties (GTS). These steps ensure consumers the authenticity, quality and traceability of food products, while also promoting traditional expertise and preserving gastronomic and cultural diversity. The National Institute of Origin and Quality (INAO), an organization under the supervision of the Ministry of Agriculture and Food, notably works on the establishment and control procedures of Quality and Origin Identification Signs (SIQO) in France (National Institute of Origin and Quality (INAO)).

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