ECO-TransH

TRANSHUMANCE HANDBOOK

EDUCATIONAL GUIDE

MULTI-COUNTRY

TRANSHUMANCE PRACTICES



FRANCE, GREECE, ITALY, MOROCCO, MONGOLIA, ROMANIA

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Transhumance, from the Latin “transumere” (“trans” meaning “across/beyond” and “humus” meaning “soil/earth”), is a form of pastoralism involving the seasonal movement of people and their livestock (sheep, cattle, goats, horses, donkeys, etc.) between different geographical and/or climatic regions along traditional pastoral routes (Andorra: “carrerades”; Albania: “shtigje”; France: “drailles”; Greece: “strates”/“diava”; Italy: “tratturi”; Romania: “drumurile oilor”; Spain: “cañadas”) or established routes.

Extract from the Inventory Form – Nomination File No. 01964 for Inscription in 2023 on the Representative List of the Intangible Cultural Heritage of Humanity
https://ich.unesco.org/fr/RL/la-transhumance-deplacement-saisonnier-de-troupeaux-01964

In the appendices, you will find an extract from the inventory form for transhumance, inscribed on the Representative List of the Intangible Cultural Heritage of Humanity.







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PRÉAMBULE

Transhumance, inscribed on the Representative List of the Intangible Cultural Heritage of Humanity in 2023, is much more than the seasonal movement of herds: it is a way of life, a complex set of skills and knowledge, an ecological balance, a form of collective organisation and a centuries-old cultural heritage shared by many communities across Europe and the Mediterranean.

This international recognition highlights the need to preserve, pass on and adapt this practice in a rapidly changing world, faced with the effects of climate change, rural depopulation, competing uses of natural areas and the difficulties young livestock farmers face in establishing themselves.

In this context, the Transhumance Handbook plays an essential role.
It is a practical, straightforward and comprehensive tool intended for everyone who organises, supports or takes part in transhumance.

It brings together all the key stages, good practices, points requiring particular attention, animal health requirements, organisational aspects and regulatory obligations. It also covers safety, animal welfare, relations with other users of the areas crossed and the reception of herders and their livestock in the territories concerned. Throughout the handbook, examples from the six countries involved in the ECO-TransH project — **Italy, France, Greece, Morocco, Mongolia and Romania** — are provided, together with photographs.

This handbook therefore highlights the similarities and differences in how transhumance is practised, addressing each of the aspects mentioned above.



In the appendices, you will find country-specific fact sheets outlining the different stages of transhumance.



INTRODUCTION

• OBJECTIVES OF THE HANDBOOK

This handbook addresses several key needs.

1

A need to pass on knowledge

Transhumance relies primarily on oral knowledge and skills passed down from generation to generation. However, this chain of knowledge transmission has weakened.

The handbook makes this knowledge accessible, structures it and preserves it, so that young livestock farmers, new professionals and learners have a reliable, shared and lasting reference.

2

A need for professional development and support

Transhumance routes are becoming increasingly complex :

- A growing number of stakeholders (livestock farmers, local authorities, natural area managers, tourists and government services),
- Increasing animal health and climate-related challenges,
- The need to ensure the safety of animals and people,
- The importance of dialogue between stakeholders across the territories concerned.

This guide should help make transhumance practices safer, more consistent and more effective by providing practical guidance for managing livestock movements safely and with confidence.

3

A need for inclusion and rural revitalisation

The territories crossed by transhumant herds need vitality, human presence and collective initiatives. Recognised for its ability to foster social connections, hospitality, local initiatives and sustainable tourism, transhumance can play a key role in rural revitalisation.

This document supports this ambition by facilitating the organisation of well-coordinated, inclusive transhumance movements that are understood and shared by all.

4

A tool for European, Mediterranean and far-reaching international cooperation !

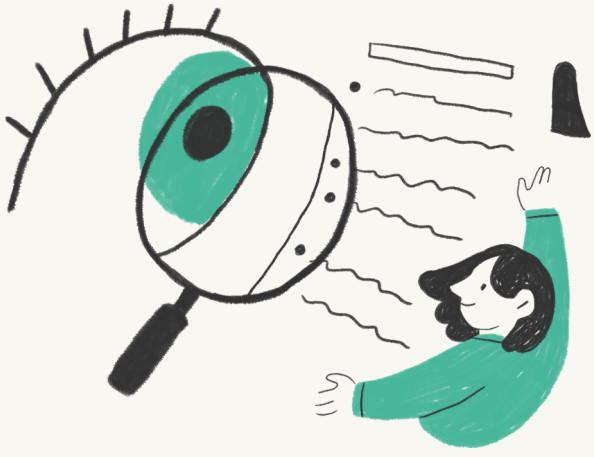
Transhumance, involving the movement of herds, is inherently transnational.

This practical resource therefore helps establish a common language between countries, training programmes, territories and pastoral communities.

It could become a valuable resource for pastoral projects, for safeguarding measures set out in national and international plans, and more broadly for cooperation between pastoral regions.

The Transhumance Handbook is more than just a technical guide.

It is a tool for safeguarding, a resource for training, a means of fostering dialogue across territories and a cornerstone of knowledge transmission, serving those who keep this unique cultural heritage alive today and are preparing its future.



- **WHY TRANSHUMANCE WAS INSCRIBED ON UNESCO'S REPRESENTATIVE LIST OF THE INTANGIBLE CULTURAL HERITAGE OF HUMANITY IN 2023 (CULTURAL, SOCIAL AND ENVIRONMENTAL VALUES)**

Transhumance embodies a complete socio-economic system: livestock farming, food production, crafts, gastronomy, the transmission of knowledge and skills, seasonal festivals and gatherings, and cultural traditions.

It fosters social and community connections: families, shepherds, communities living along transhumance routes, residents of the territories crossed, festivities, hospitality, solidarity and intergenerational exchanges.

It contributes to the vitality of rural territories by helping to maintain populations, preserve natural areas (pastures and mountain grazing areas), keep traditions alive, and promote local knowledge, skills and products — all valuable assets in addressing rural decline.

It is a living heritage passed down from generation to generation: families, pastoral communities, livestock farming networks, associations, rural institutes, schools and universities all contribute to passing on the practices, knowledge and values associated with transhumance.

- **MULTINATIONAL DIMENSION: COUNTRIES INVOLVED AND DIVERSITY OF CONTEXTS**

The nomination was submitted by 10 States: Albania, Andorra, Austria, Croatia, France, Greece, Italy, Luxembourg, Romania and Spain.

This diversity of contexts — plains, mountains, Mediterranean areas and Alpine territories — reflects the many forms of transhumance, including differences in routes, climates, livestock species, traditions, languages and communities. This reinforces the universal value of the practice.

Multinational recognition enables cross-border cooperation, knowledge sharing, the promotion of shared routes and heritage, and the collective preservation of transhumance as a living European heritage.

- **WHAT INSCRIPTION ENTAILS: RESPONSIBILITIES AND SAFEGUARDING POTENTIAL**

Inscription highlights the need to protect trails, pastures and pastoral routes, and to maintain the conditions necessary for transhumance (access to land, respect for seasonal cycles and herd management). It also:

- Encourages the promotion of pastoral knowledge and skills, local breeds and pastoral cultures, support for livestock farmers and communities, greater involvement of young people, and the development of vibrant rural communities.
- Opens up opportunities for international cooperation, education, knowledge transmission, sustainable tourism and territorial development. Transhumance thus becomes a means of fostering solidarity, biodiversity, cultural heritage and the attractiveness of rural territories.

- **OVERVIEW OF THE ECO-TRANSH PROJECT OBJECTIVES**



How Does This Handbook Align with the Priorities Arising from UNESCO Inscription?

The ECO-TransH project – The Agroecosystem of Transhumant Herds – is part of a global effort to safeguard, promote and pass on the knowledge and skills associated with transhumance, in line with the international safeguarding plan for the practice as recognised in 2023.

The main objective of ECO-TransH is to address the contemporary challenges of generational renewal and the loss of knowledge and skills transmission in agricultural professions, with a particular focus on transhumance as a sustainable approach to herd management, the preservation of open landscapes and support for local pastoral economies.

The project therefore aims to train and attract young people who aspire to become livestock farmers, raise awareness of and encourage the exchange of good practices, promote transhumance within agricultural vocational education and training systems, and showcase the products and territories associated with transhumance.

ECO-TransH brings together six partner countries where transhumance is practised and is deeply rooted in strong sociocultural and environmental traditions: France, Greece, Italy, Morocco, Mongolia and Romania.

The project contributes directly to :

- Preserving living heritage through the intergenerational transmission of pastoral knowledge and skills essential to the survival of this traditional practice.
- Integrating transhumance into structured training programmes, making it more attractive as a sustainable and viable profession.
- Promoting the cultural, social and environmental value of transhumance, recognised by UNESCO as a complex socio-ecological system involving community, cultural, economic and landscape-related practices.

Although transhumance is now officially inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity for several European countries (including Italy, Greece, France and Romania), the ECO-TransH project extends this initiative to broader contexts: Morocco and Mongolia.

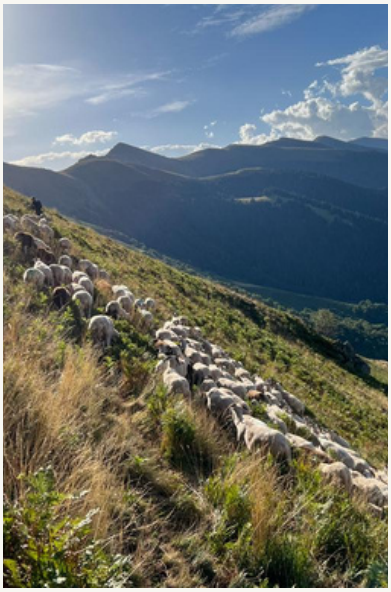
In this respect, ECO-TransH and this handbook serve as practical educational tools for networking, knowledge sharing and capacity building. They address both local objectives for sustainable rural development and the international priorities associated with UNESCO inscription, namely :

- Safeguarding knowledge and skills and strengthening social connections.
- Promoting environmental sustainability.
- Encouraging generational renewal in pastoral practices that are valuable to humanity.



- CULTURAL HERITAGE & INTERNATIONAL RECOGNITION

France



Greece



Italy



Morocco



Mongolia



Romania



Mongolia

In Mongolia, transhumance is more closely associated with pastoral nomadism, a practice that is exceptionally rich and vital to the country : Mongolian herders move their livestock over very long distances according to the seasons, following ancestral routes.

Although transhumance in the sense of “fixed seasonal routes” (as practised in Europe) does not always involve exactly the same type of movement as Mongolian pastoral nomadism, pastoral mobility remains essential : it allows herders to make the best use of available pastures according to the season and adapt their herds to climatic variations (drought, frost, etc.).

From the perspective of the FAO and pastoralism, Mongolia is often cited as an example of highly developed mobile pastoralism : this form of pastoralism contributes to food security, resilience to climate shocks and the conservation of the steppe ecosystem. (Although the FAO does not always use the term “transhumance” in its European sense, the principles of pastoral mobility are very similar.)

Culturally, pastoral mobility (including transhumance) is deeply rooted in Mongolian identity : the traditions of nomadic herding and the transmission of knowledge and skills (livestock farming, yak herding, yurts, winter and summer migration routes) are essential elements of intangible cultural heritage that must be preserved.

Furthermore, herders’ mobility in Mongolia can play a role in pasture conservation : by preventing continuous overgrazing in the same area, mobile herds can allow grazing areas to regenerate, which is important for fragile steppe ecosystems.







However, the element entitled **"Mongol nomad migration and its associated practices"** was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in December 2024 (Decision 19.COM 7.b.49).

What UNESCO Recognises Through This Inscription

That Mongolian nomadic culture — namely, livestock farming families who move their herds between pastures according to the seasons — constitutes a traditional "way of life" based on the interdependence of pastures, livestock and herders.

That these migrations are not merely movements of livestock, but are accompanied by social practices, rituals, traditional knowledge and skills, and customs : preparing for migration, choosing departure dates according to climatic conditions and pasture availability, dismantling and reassembling nomadic dwellings (yurts / gers), managing pastoral resources, respecting the land and using the environment responsibly, etc.

That this traditional management of pastoral routes helps maintain a balance between livestock farming, nature and communities, and that it has cultural, social, ecological and identity-related heritage value.

Context and Significance of the Recognition

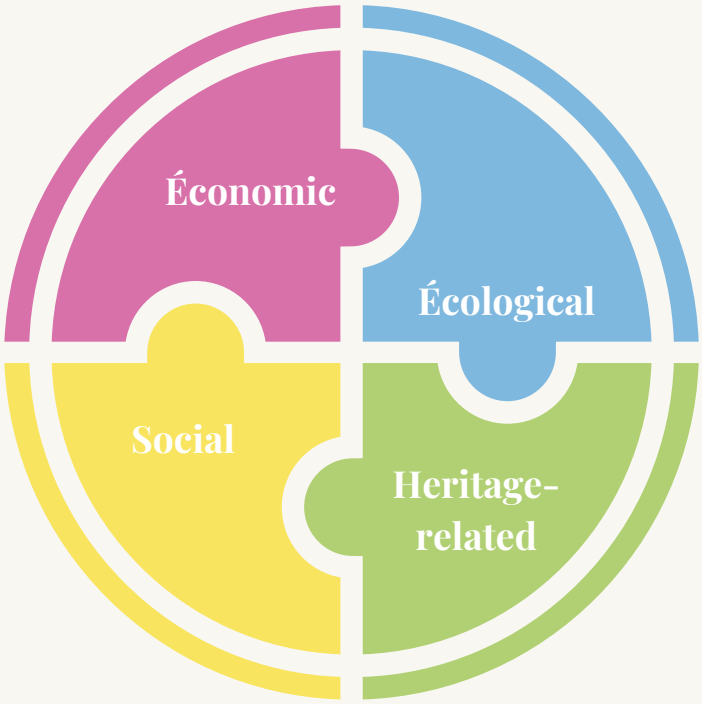
This inscription makes Mongol nomad migration the 16th element of Mongolia's intangible cultural heritage to be officially recognised by UNESCO. UNESCO highlights that these traditional practices — passed down from generation to generation — contribute to resilience, the preservation of land-related knowledge, ecological balance and social cohesion.

In summary : what has been recognised in Mongolia is not merely the movement of herds as a simple pastoral practice, but Mongolian nomadic culture in all its dimensions — a way of life, knowledge and skills, their transmission, sustainable pasture management, and the relationship with living beings and nature.



THE CHALLENGES OF TRANSHUMANCE

- KNOWLEDGE, SKILLS, PRACTICES AND TRANSMISSION



Transhumance relies on complex and specialised knowledge and skills : herd management, in-depth knowledge of routes, water resources and pastures, the use of herding dogs, artisanal production (cheese, wool and milk), and the collective organisation of livestock movements.

These skills are passed down from generation to generation through rituals, pastoral festivals and customary practices, as seen, for example, in **France** (summer grazing festivals and livestock bells), **Italy** and **Greece** (rituals marking the departure and return of herds), and **Romania**, where women play an essential role in transmitting pastoral knowledge and skills.







• ECOLOGICAL AND ENVIRONMENTAL ROLE

Transhumance plays a major role in maintaining ecosystems and biodiversity. By ensuring the seasonal use of pastures, it helps to :

- Prevent shrub encroachment and the overgrowth of abandoned land (mountain pastures and summer grazing areas in **France**),
- Maintain biodiversity-rich semi-natural grasslands (**Romania**),
- Distribute grazing pressure across vast territories (**Greece, Mongolia**),
- Preserve semi-natural habitats and open landscapes (**Italy**).

Certain practices illustrate a beneficial agroecological approach, such as the use of manure from pastoral livestock in local agriculture, as was the case in the Cévennes, or the continuous adaptation of livestock movements to available resources in **Morocco's** arid regions.

• SOCIAL, ECONOMIC AND TERRITORIAL DIMENSIONS

Transhumance shapes pastoral communities and contributes to social cohesion in rural territories. It supports local economies based on livestock farming, the processing of agricultural products, cultural tourism and the promotion of landscapes.

In challenging environments — European mountain areas, Morocco's arid regions and the Mongolian steppes — pastoral mobility makes it possible to use marginal land that is often unsuitable for sedentary agriculture. In **Mongolia**, mobile pastoralism is an essential component of the national economy and the livelihoods of rural populations.

• CONTEMPORARY CHALLENGES AND SAFEGUARDING ISSUES

Despite its vitality, transhumance faces a number of common challenges :

- Land pressure, urbanisation and the fragmentation of transhumance routes (**France, Italy, Greece, Romania**),
- Ageing livestock farmers and difficulties in achieving generational renewal,
- Loss or deterioration of traditional transhumance routes,
- The impacts of climate change (droughts, variability in available resources), which are particularly pronounced in **Morocco** and **Mongolia**.



THE STAGES OF TRANSHUMANCE

- Preparation
- Administrative Preparation
- Animal Health Preparation
- The Animal and the Herd
- Arrival at the Summer Pastures : Reception and Settling In
- Cross-cutting Issues and Adaptations







THE STAGES OF TRANSHUMANCE

- **OPERATIONAL CHECKLISTS**

Before **During** **After**

Before Departure :

- Route confirmed (maps, stages, water sources) + authorisations (local authorities, landowners).
- Animal health requirements met (tests, vaccinations), animal identification and movement documents.
- Equipment checked (fencing, PPE, signage, veterinary first-aid kit, marking equipment).
- Dogs identified and trained ; canine first-aid kit ; muzzles if required locally.
- Communication plan (notices, social media), emergency contacts.

During ;

- Daily briefing ; weather forecast ; adjustment of the pace.
- Management of watering and supplementary feeding ; breaks in the shade.
- Cleaning of roads and paths where necessary ; respect for other users.
- Travel log / grazing plan (km, incidents, decisions).

After :

- Animal health assessment and post-walk care ; equipment maintenance.
- Debriefing with stakeholders ; areas for improvement.
- Communication to showcase the transhumance (photos, local press, social media).



THE STAGES OF TRANSHUMANCE

• STEP 1 : PREPARATION

Before Undertaking Transhumance

Transhumance is a complex journey that requires extensive preparation to ensure everything runs smoothly.

Route Planning : Stopover Points and Itineraries

L'éleveur commence par planifier le trajet, qui peut s'étendre sur plusieurs centaines de kilomètres. Il doit calculer :

- les distances à parcourir chaque jour,
- les points d'étape pour le repos et l'alimentation du troupeau,
- la date d'arrivée en estive pour bénéficier de pâturages optimaux.

As a guide, the average distances covered per day vary depending on the species and conditions :

- 10 to 15 km for sheep and goat herds,
- 25 to 30 km for cattle herds,
- 30 to 40 km for horse and donkey herds.

These routes are often passed down from generation to generation, but may be modified due to :

- Sections that have become impassable (roads, construction of houses, etc.),
- Climate change leading to shortages of water and fodder, both of which are essential for transhumance.







Choosing Whether to Move Livestock on Foot and/or by Truck

In most countries, such as France, Italy and Romania, livestock may also be transported by truck during transhumance. This is often practised by large farms or to bypass difficult areas (for example, over long distances of 500 km in **Mongolia**) :

Advantages : avoids problems associated with shortages of resources (water and fodder) and helps reduce certain conflicts over land use.

Disadvantages : animals arrive at the grazing areas in poorer physical condition than those accustomed to walking, and this method generates an environmental footprint that varies depending on road transport and the distance travelled. Transhumance on foot contributes to biodiversity conservation and the creation of social connections along the route.





Examples of Transhumance Routes by Country

France

Mid-mountain sheep transhumance (12 days, cumulative elevation gain of approximately 1,600 m) : daily stages of 8–14 km depending on water and shade availability, with one or two rest days ; livestock guardian dogs and mobile fencing ; coordination with two municipalities for crossings and cleaning.

Italy

Section of the Celano–Foggia Tratturo : heritage stopovers, restored watering points, cultural engagement with the public ; urban crossings occasionally supervised by the local police.

Greece

Thessaly, the Pindus Mountains, with sheep and goats : walking during the cooler hours, resting in the shade, watering in the morning and evening ; increased parasite monitoring.

Romania

Ascent towards the Carpathians (Maramureș/Sibiu) : veterinary certificates, agreements with local villages, promotion of cheese products (brânză) ; operational shepherds' huts (stâni) and community support.

Morocco

Goat transhumance in argan woodlands (Souss) : livestock passage corridors negotiated with the community (customary landowners, local families) or organised by livestock farmers' associations ; protection of young argan trees ; water transported to the area during dry periods ; income diversification (argan products and goat kids).

Mongolia

Spring migration route between the steppes and riparian woodlands : stopovers at wells, yurts dismantled and reassembled ; alternating between horseback travel and truck transport depending on weather conditions ; customary rules for sharing resources.







Organisation and Logistics of Transhumance

:

Although transhumance is adapted to local conditions, it is based on common principles : careful planning, organised logistics and knowledge and skills passed down from generation to generation. This raises questions about its long-term sustainability and the solutions needed to preserve it.

- **European Countries**

The transhumance season generally begins between May and June and ends between September and October, whether for vertical migration (ascent to summer mountain pastures) or horizontal migration (movement over long distances at a relatively constant altitude).

Livestock farmers use accommodation close to their herds, such as rural lodgings or mountain huts.

Animals are often adorned with decorations : flowers, ribbons or bells. In the past, these bells were used to alert villages to the arrival of herds ; today, they contribute to the cultural heritage and appeal of transhumance.

- **Non-European Countries**

In **Morocco** and **Mongolia**, transhumance involves moving not only the herds but also families, provisions and shelters (tents, yurts), which requires more complex logistics.

Travel often involves trucks, horses or camels, as all the equipment needed for self-sufficient living must be transported.

In **Mongolia**, transhumance shapes much of the year, and the nomadic way of life is entirely adapted to the seasonal needs of the animals and extreme climatic conditions.

In Morocco, in the Atlas and Rif Mountains, transhumant families must plan their food and water supplies and adapt their stopovers to the terrain and weather conditions, unlike in Europe, where infrastructure and accommodation make the journey easier.







Conclusion on the Logistics and Preparation of Transhumance

:

Despite these differences, all livestock farmers share similar approaches :

- Careful planning of routes and stopovers,
- Logistics adapted to local conditions,
- Transmission of knowledge and skills.

These practices face new challenges, requiring flexibility and adaptation to ensure the long-term survival of this cultural and agricultural tradition.

Preparation combines :

- Mapping (water sources, grazing resources, elevation changes, roads and sensitive areas),
- On-site route inspections,
- An adapted schedule (early departures and regular rest breaks),
- Proactive contact with stakeholders (local authorities, landowners, park authorities, hunters and hiking clubs) and contingency plans (alternative arrangements in case of adverse weather or water shortages).
- **A clear communication protocol** helps reduce tensions : posters, local authorities' social media, a standard email to local authorities and an emergency contact number.
- Logistical arrangements include safe stopover areas, mobile fencing and solutions for shade and shelter.



Logistics ensure the safety of the herd and people : high-visibility personal protective equipment (PPE), walkie-talkies, “Livestock” warning signs, electric fencing, posts, wires, batteries, water tanks and hoses, feeders, mineral supplements, a veterinary first-aid kit (antiseptics, needles, dressings, thermometer), a canine first-aid kit, marking equipment (paint, ribbons), documents (authorisations, animal health certificates, insurance) and a support vehicle for transporting equipment and responding when needed. Accommodation ranges from bivouacs and yurts to rural lodgings and mountain refuges. Arrangements should also be made for evacuating tired animals and collecting waste.

France
Support van, stopover accommodation or sheepfolds depending on the mountain range ; spare stock of electric fencing nets and batteries.

Italy
Backup truck for crossing areas with heavy road traffic ; mountain refuges and heritage stopovers along the tratturi.

Greece
Bivouacs near water sources and shaded areas ; mules used to transport equipment along steep trails.

Romania
Pick-up trucks or carts depending on the terrain ; community support for stopovers ; access to high-altitude sheepfolds (stâne).

Morrocà
Berber tents ; sometimes camels to carry equipment over rugged terrain ; prioritise water management and routes through forested areas.

Mongolia
Dismantlable yurts ; horses for herding ; trucks (UAZ) for transporting heavy equipment and seasonal movements.







• STEP 2 : ADMINISTRATIVE PREPARATION

Successful livestock movement relies on clear governance : allocation of routes, land-use rights, passage authorisations, movement declarations and compliance with animal health requirements.

In Europe, the Common Agricultural Policy (CAP) supports the protection of herds against predation (livestock guardian dogs, fencing and herding) and encourages practices compatible with biodiversity. Local authorities (municipalities, departments and provinces) play a mediating role with local residents and other users (motorists and hikers).

Movement documents, veterinary certificates and insurance must be arranged in advance, while passage agreements specify responsibilities and rules relating to cleanliness and safety. Finally, recent developments concerning the protection status of wolves in Europe highlight that the regulatory framework is evolving and must be closely monitored by livestock farmers.

Safety During Livestock Movements (Roads, Paths and Local Residents)

On public roads : place warning signs in advance, position accompanying personnel at junctions, keep a lane clear for overtaking where possible, and clean the road if necessary.

On private land : obtain written permission.

Inform local residents (notices, social media) and provide simple instructions (slow down, be patient, do not sound your horn).

Establish an emergency contact number and an incident response protocol (incident reports, photographs and prompt mediation).



France : Temporary warning signs and possible municipal escort ; pay particular attention to tourist areas and rush hours.



Italy : Urban crossings along the tratturi are sometimes supervised by the local police (polizia locale) ; coordination is useful during cultural events.



Greece : Preferably walk early in the morning or in the evening ; avoid extreme heat ; inform local authorities of the expected passage times.



Romania : Routes avoiding major roads ; occasional coordination with the rural gendarmerie at critical junctions.



Morocco : Avoid sensitive agricultural areas and argan trees bearing fruit ; favour times when traffic is light.



Mongolie
Enhanced safety measures near soum (district) centres ; avoid night-time crossings near villages.

However, other rules also apply :

France

Inform local authorities of the planned movement ;
Mandatory declaration to the prefectures depending on the route ;
Herd protection support schemes (livestock guardian dogs, herding and electric fencing) and annual calls for projects.
Movement on roads : compliance with road traffic regulations and coordination with local authorities.

Italy

The tratturi and their associated rights of use govern many livestock movements ; municipalities and the local police (polizia locale) may escort herds through sensitive crossing points ; regional legislation recognises the heritage value of these pastoral corridors.

Greece

Public and communal pastures are allocated through plans approved by regional authorities ; municipalities resolve conflicts over land use and organise access to water while preventing overgrazing.

Romania

Pasture users' associations manage communal pastoral resources ; APIA and official veterinarians oversee payments and certificates ; routes are not always marked, making village-level agreements and documentation particularly important.

Morocco

Rules vary by province ; ANOC provides technical support, breed selection and professional development ; local negotiation is essential for access to water and passage through argan-growing areas.

Mongolia

A strong customary framework operates alongside national regulations ; seasonal rotation is governed by established practices and community consultation ; adaptation to extreme climatic conditions takes priority in decisions about livestock movements.



Reminder of mandatory requirements :

In several countries, informing local authorities before setting off on transhumance is essential. The aim is to ensure safety, the orderly movement of herds and coordination with the local authorities concerned.

- **France :** mandatory declaration to the prefecture and notification to local authorities.
- **Romania, Italy and Greece :** mandatory notification to local authorities, but no declaration to the prefecture is required, as the administrative systems differ.

Veterinary declaration

Veterinary declarations or checks are intended to establish the exact number of animals undertaking transhumance (outward and return journeys) and to ensure their health status. They help prevent the spread of diseases during the summer grazing period, particularly when herds are mixed.

Examples by country :

- **France, Romania, Greece, Morocco and Italy** : veterinary declarations are mandatory or subject to strict requirements.
- **Mongolia** : no formal administrative procedure ; livestock farmers carry out checks, vaccinations and animal health monitoring themselves, using methods based on experience and traditional knowledge.

Common Agricultural Policy (CAP) declaration

In European countries, the Common Agricultural Policy (CAP) declaration identifies transhumant livestock farmers so that they can receive financial support. It therefore helps maintain the economic viability of this practice.







Special cases

Italy : In addition to notifying municipalities, the detailed route must be submitted to local authorities (police, gendarmerie). These services ensure safety during the passage of livestock. Transhumance is strictly regulated by specific legislation (Laws No. 54 and No. 16).

Morocco : Livestock movements are governed by Law No. 113-13 of 2016, but in practice, passage is often negotiated with the community (customary landowners and local families) or organised by livestock farmers' associations, resulting in arrangements that vary between pastoral areas.

Mongolia : The system relies primarily on livestock farmers' self-management and the transmission of ancestral knowledge. Administrative procedures are kept to a minimum, with collective management based on traditional practices.

France : In addition to notifying municipalities and prefectures, livestock farmers must declare transhumance to the DDT (Departmental Directorate for Territories).
To simplify the procedures :

- A simple email may be sent to the municipalities concerned (optional).
- Dedicated software, CSO, can be used to declare animal movements and manage the summer grazing period.

Greece : The allocation of pastoral land is managed directly by the State. The area allocated depends on herd size, which may result in a change of transhumance location from one year to the next.



• STEP 3 : ANIMAL HEALTH PREPARATION*

Animal health preparation is an essential step before any transhumance. In several countries, two veterinary declarations are required : one to the veterinary service at the place of departure and the other to the veterinary service at the destination. These procedures ensure traceability, the health status of the herds and compliance with national regulations.

General example – **Romania** (see detailed fact sheet in the appendix)
In Romania, transhumance routes are not marked.
The livestock farmer must first obtain a supporting document from the municipality, then visit the agricultural administration (APIA) to collect the documents required for the movement. A veterinarian then :

- checks the identification of the animals (markings, ear tags),
- records the number and age of the animals,
- issues a certificate authorising transhumance.

Animal Welfare & Health Protocols

Before departure :

- check body condition, hooves and teeth,
- establish an appropriate vaccination plan,
- favour targeted faecal testing to limit resistance to antiparasitic treatments,
- check animal identification and prepare movement certificates.
- During the journey : ensure regular access to water and shade, maintain an appropriate pace, allow rest days, isolate and treat injured animals, and monitor the dogs (hydration, paw pads)...
- On return : carry out an animal health assessment and provide post-transhumance care.

**The content is not exhaustive and may change in accordance with animal health regulations in the countries concerned and in Europe, as well as the consequences of climate change.*







Animal Health Checks

Animal health checks aim to prevent disease and ensure animal welfare before, during and after the summer grazing period. Prophylaxis encompasses all measures intended to prevent the onset, spread or worsening of a disease.

Countries with comprehensive veterinary checks : **France, Romania, Italy and Greece**
In these countries, veterinarians :

- check animal markings and ear tag numbers,
- check the number of young animals, their age and general condition,
- may take blood samples,
- examine females during calving,
- ensure animal welfare.

Checks are carried out before and after the animals move to summer pastures, on the basis of the certificates provided.

Countries with simplified animal health checks : **Morocco** and **Mongolia**
In both **Morocco** and **Mongolia**, only essential vaccinations are required.

No comprehensive veterinary certificate is required, as livestock farmers rely more on their own expertise and traditional preventive practices.

Blood Tests, Vaccinations and Seasonal Treatments

In Romania, treatments and animal health checks follow a strict schedule. (Detailed example in the appendix)

In winter (December to March), fodder, which is often damp, is checked, and animals are monitored for abortions, fungal infections, parasites, respiratory infections and lamb weight.
IBR screening is carried out as in **France**.
Seasonal vaccinations are administered, including vaccination against contagious agalactia (as in **France** and **Greece**). Prevention of muscular dystrophy in newborn animals is not mandatory. Checks are also carried out for insufficient milk production, salmonellosis and parasites, including mange.

In January, all animals except young animals receive treatment against respiratory diseases. The health of livestock guardian dogs is monitored to prevent disease transmission.

In spring (April to June), vaccinations cover enterotoxaemia, mange and anthrax, as in **France** and **Greece**, and health checks on dogs are intensified.

In summer (June to August), newborn animals are treated, mastitis is treated and prevented, and blood tests, vaccinations and seasonal treatments continue.

In autumn, general treatments include vaccination against mange (mandatory), vaccination against anthrax and hoof checks, which are essential to prevent lameness during the summer grazing period.

Examples from Other Countries

:

Italy – Official Checks and Animal Health Certification

In Italy, animal health services take samples to screen for :

- brucellosis,
- tuberculosis, as is also practised in France. Blood samples are taken from the entire herd. If all animals test negative, the holding is certified disease-free and the mayor may authorise livestock movements.

Mongolia – Extensive Vaccination Coverage

In Mongolia, approximately 21 vaccines are administered to herds :

- brucellosis (Strain 19 and Rev.1),
- anthrax,
- various types of influenza (ovine, swine, avian...),
- intrauterine infections,
- rabies, cholera and enterobacterial infections,
- other endemic diseases.
- The country implements a comprehensive prevention strategy in view of the extensive movements of pastoral herds.

Morocco – Vaccination at the Livestock Farmer's Initiative

All animals must be up to date with their vaccinations. To access free veterinary care, livestock farmers must be members of ANOC.

- Goats : vaccination visits every 3 months.
- Sheep : visits every 6 months.

France & Greece – Mandatory Vaccination

Both countries require preventive vaccinations :

- blood tests within 2 months before moving to summer pastures and after returning,
- screening for brucellosis, tuberculosis and IBR,
- vaccination against anthrax may be required depending on the area.



Disease Risks

:

Here is a summary of the main diseases monitored in the partner countries :

IBR – Infectious Bovine Rhinotracheitis

- Affects the respiratory tract.
- Symptoms : fever above 40°C, lethargy, nasal discharge, conjunctivitis and possible abortions.
- Caused by bovine herpesvirus type 1.

Brucellosis

- Transmissible to humans.
- Causes abortions, reduced fertility and a decline in milk production.
- Symptoms are often subtle and mainly affect the reproductive organs.

Tuberculosis

- Symptoms : weakness, loss of appetite, weight loss, fluctuating fever, intermittent dry cough, diarrhoea and swollen lymph nodes. Pulmonary symptoms generally appear only at a late stage.
- The disease is often detected late.

Anthrax

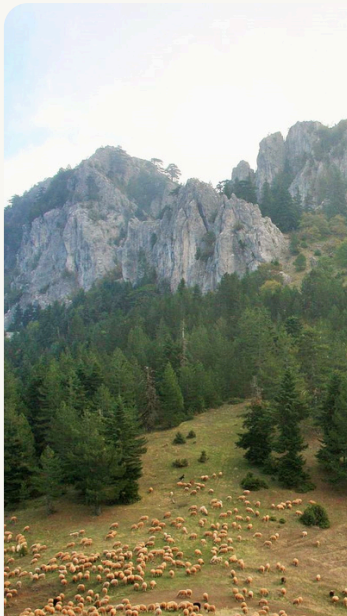
- Vaccination against anthrax is used in sheep and cattle farming and is recommended in areas where the soil contains bacterial spores (particularly after drought followed by heavy rainfall).

Mastitis

- Inflammation of the udder, common in dairy cows and ewes.
- It may be caused by bacterial infections, trauma or environmental factors.







Examples by Country

Romania – Parasites Transmitted by Livestock Guardian Dogs
Dogs may carry Echinococcus granulosus (dog tapeworm). Grass or water may become contaminated ↠ cysts may form in animals' organs ↠ economic losses.

Morocco – Specific Vaccinations for Transhumant Herds
PPR (Peste des Petits Ruminants) – Sheep and Goats.

Mongolie – Stress migratoire & maladies endémiques
Frequent movements between pastures may contribute to :

- mineral deficiencies (particularly copper),
- endemic diseases :
  - echinococcosis,
  - Coenurus cerebralis infection,
  - anaplasmosis,
  - babesiosis,
  - tick-borne and parasitic diseases.

Exceptional Measures
In the event of serious infectious diseases (foot-and-mouth disease, rabies), **strict quarantines** and **movement restrictions** are imposed in all countries to limit their spread.

Additional Risks

Italy – Risks Associated with Soil and Wild Animals
In Italy, clay soils increase the risk of lameness in herds, as they become slippery or sticky depending on moisture levels. When infected animals are nearby, the risks of :

- brucellosis,
- bluetongue are higher. Infection may also originate from wildlife, particularly in transhumance areas where indirect contact is frequent.



• STEP 4 : THE ANIMAL AND THE HERD

Choosing Breeds

The choice of breeds for transhumance is crucial. Livestock farmers favour hardy local breeds adapted to challenging environments : rugged terrain, climatic variations, long distances and poor-quality forage. Their robustness, ability to travel long distances and capacity to make use of limited feed resources make them essential to transhumance.

Choosing robust breeds suited to the terrain and climate improves mobility, the use of grazing resources and resilience.

Herding dogs (e.g. Border Collies) guide the herd's movement ; livestock guardian dogs (Patou, Kangal, Maremmano, Bankhar...) deter predators.
Training, identifying and insuring these dogs is essential ; financial support is available in several countries and regions.

France — Sheep : Manech/Tarasconnaise ; cattle : Gasconne ; livestock guardian dogs are widely supported by public funding schemes.

Italy — Sheep : Sarda/Bergamasca ; livestock guardian dogs : Maremmano-Abruzzese ; a centuries-old tradition along the tratturi.

Greece — Greek Shepherd dogs and hardy sheep and goat breeds adapted to steep terrain.

Romania — Sheep : Ţurcana/Ţigaie ; livestock guardian dogs : Ciobănesc Mioritic and Carpatin, adapted to the Carpathians.

Morocco — Sheep : Sardi, Timahdite, D'man ; livestock guardian dog : Aïdi (Atlas Mountain Dog).

Mongolia — Mongolian sheep ; the traditional Bankhar dog, which protects nomadic camps.







France – Breeds Adapted to Mountainous Terrain

Gasconne des Pyrénées : cattle breed

- A true all-terrain breed.
- Black mucous membranes ↠ protection against temperature extremes.
- Short, dense coat ↠ resistance to parasites.
- Very hard hooves ↠ adaptation to difficult terrain.
- Excellent ability to make use of available forage : short grass, leaves and shrubs ↠ self-sufficiency during the four months spent on summer pastures.

Other breeds used : In the Pyrenees, there are 10 local breeds adapted to mountain terrain and long-distance walking. The most representative are the Tarasconnaise and Manech.

In France, CORAM (Collectif des Races de Massif) identifies approximately five local mountain cattle breeds :

- 3 beef cattle breeds,
- 2 dairy cattle breeds,
- found in France's mountain regions (Alps, Pyrenees, Massif Central, Vosges and Corsica).

Local Sheep Breeds

Of the 59 sheep breeds recorded nationally, approximately 48 are considered local breeds, adapted to specific environments (mountainous areas, dry regions and mixed landscapes).
These include 20 meat-producing sheep breeds and 4 dairy sheep breeds found in France's mountain ranges.

Morocco – Breeds Resistant to Hot and Arid Climates

Draa Goat

- Highly resistant to extreme heat and harsh conditions,
- Adapted to dry, poor soils,
- Very agile : capable of travelling long distances,
- Good resistance to parasites,
- Excellent productivity.

Another breed used : Beni Guil (Oriental region, a major transhumance area).



Italy – Hardy Breeds for Rugged Terrain

Sarda Sheep

- Resistant to climatic variations.
- Excellent walker ↠ capable of travelling long distances.
- Good resistance to parasites.
- Calm and docile temperament ↠ makes herd management easier.
- Able to make good use of poor-quality pastures.

Romania – Breeds Able to Make Use of Poor-Quality Forage

Ţurcană Sheep

- Excellent ability to make use of poor-quality forage.
- Well-developed musculature ↠ good physical endurance.
- Good reproductive capacity.
- Highly valued meat production ↠ a valuable breed for livestock farmers.

Carabașa Sheep

- The Carabașa ewe (also known as the Black-headed Ţigaie or Cap Negru de Teleorman) is a highly productive breed, but it is sensitive to poor-quality forage. Although it is a hardy and adaptable breed in Romania, it requires high-quality feed to reach its full production potential (meat and milk).

Mongolia – Breeds Adapted to Extreme Climates and the Steppe

Mongolian Sheep

- Perfectly adapted to the country's harsh climate.
- Excellent mobility ↠ moves easily across the steppe and rugged mountainous terrain.
- Great physical robustness.
- Able to make good use of poor-quality forage and woody plants.

Greece – Breeds Adapted to Harsh Climates

Sarakatsan Sheep

This is a very old breed, closely associated with the nomadic way of life of the Sarakatsans, a group of Greek shepherds, highly adaptable to local environmental conditions, small in size, with coarse wool and a thin tail.







Choosing Dogs and Their Role in Transhumance

Choosing the right dog breed is crucial to the success and safety of transhumance. Each dog has specific abilities suited either to herding livestock or to protecting the animals.

Herding Dogs

Border Collie : highly energetic, intelligent and tenacious.

- Excellent at gathering and guiding herds over long distances.
- Able to work in difficult conditions.

Livestock Guardian Dogs

- Pyrenean Mountain Dog (Patou) and Kangal :
  - Highly developed protective instinct,
  - Calm, patient and very observant,
  - Keep the herd safe, reduce stress in the animals and ease the livestock farmer's workload.

General Benefits of Dogs

- Enhanced herd safety and a reduced workload for the livestock farmer,
- Increased productivity and efficiency,
- Reduced stress in the animals,
- Ability to work over long distances and in difficult conditions.

Education and Training

Training is essential to make full use of a dog's abilities, whether it is a herding dog or a livestock guardian dog :

- A well-trained dog understands the herd better,
- Its natural characteristics can be put to use during transhumance while minimising risks.



France

Specialist Associations and Federations :

- French Federation of Sheepdogs (FFCB),
- Union of Livestock Guardian Dog Professionals.

These organisations provide training and technical support for herding dogs and livestock guardian dogs.

CAP Support 2023–2027 :

Covers certain expenses related to herd safety and management :

- Herd supervision,
- Purchase and upkeep of livestock guardian dogs,
- Electric fencing,
- Vulnerability assessments,
- Technical support.

These lists are not exhaustive and may vary from country to country.







Shearing, Marking and Adorning Animals

Shearing

France

In the transhumant systems of south-western France (Basque Country and Béarn), ewes are traditionally shorn in autumn, before moving up to mountain pastures. Shearing, generally carried out after the end of the summer grazing season, allows farmers to manage the wool and prepare the flock for the change of season.
This schedule is influenced by the climate : the fleece protects sheep from the cold and spring rainfall, but can also become an animal welfare concern in summer.

Cultural Aspects

In France, shearing is sometimes associated with local festivals or important moments in pastoral life, particularly at events such as the Transhumance Festival, where shearing demonstrations may be held.

Italy & Greece

Annual wool shearing remains a common practice in sheep farming, often carried out in spring or autumn in pastoral areas. Shearing is an integral part of flock management, as it is in many Mediterranean farming systems.

Romania

Examples of traditional sheep shearing can be found in Romania (for example, shearers using manual shears or mechanical clippers), reflecting the importance of wool in pastoral systems. Most livestock farmers have their sheep shorn by teams of professional shearers using electric clippers.

Morocco

Sheep are generally shorn in spring, before the onset of hot weather, as local breeds require this care to prevent parasites and improve animal comfort — a practice similar to that found in other pastoral regions.



Mongolia

Mongolian nomadic herders traditionally shear their sheep to collect wool, generally in spring or early summer. The wool is then processed to make clothing or textiles. Although this is more a form of nomadic pastoralism than transhumance as defined in the European sense, shearing remains an essential annual stage in the sheep-farming cycle.

Common Principles

- Shearing schedule : in most regions, shearing takes place in spring or at the end of winter, either just before or after seasonal transhumance, to optimise animal comfort and wool quality.
- Animal health benefits : shearing helps reduce parasites, improve skin ventilation and prevent matting.
- Cultural significance : in several regions (particularly France, Italy and Spain), shearing may be part of pastoral festivals or important social gatherings.

It should be noted that the need for shearing varies depending on the breed and, therefore, the type of fleece !







Marking

Markings are temporary patterns or shapes applied to animals' coats to distinguish them from other herds.

- They help prevent herds from becoming mixed during transhumance or when grazing on communal pastures. (Generally : one mark identifies the livestock farmer and another identifies the grazing location.)
- They also make herd management easier for livestock farmers and their guardian dogs.

Examples by Country :

Mongolia : no marking is used, as livestock farmers know each of their animals individually and do not need visual identifiers.

Morocco : animals are identified in March, at approximately one month of age, through markings on their ears. The most widely used method, practised for many years, is hot-iron branding using a sickle. Today, animal marking is governed by the National Identification and Traceability System (SNIT), which is based on pastoral regulations. Approved identification methods include ear tags.

Other countries : marking remains a common and practical method.

Adornments : Bells

Bells serve a dual purpose : practical and decorative.

- During transhumance, the sound of bells helps livestock farmers locate their herd, particularly in mountainous or wooded areas.
- During festive processions through villages, they become decorative elements.

Examples by Country :

Italy & France : some bells are used exclusively for parades : they are large, decorative and less practical for everyday work. They are considered ceremonial adornments that showcase the herd.

Other countries : bells are mainly functional, with less emphasis on folklore.



Decoration

In addition to bells, animals may be adorned with :

- Bouquets of flowers,
- Wreaths,
- Fabrics or ribbons,

Examples by Country :

France :

- Alps : striking, elaborate decorations,
- Pyrenees : more discreet flower wreaths.

Italy : colourful, festive decorations that form part of local folklore.

Romania : more modest use of adornments, less elaborate than in France and Italy.

Morocco, Greece and Mongolia : simple decorations or none at all ; emphasis is placed on their practical rather than festive purpose.

Transhumance is not only an agricultural practice ; it is also a cultural and festive occasion.

In some villages :

- Animals are adorned with their finest bells, flowers and other decorations,
- Festivals and gatherings are organised to mark the passage of the herds.

A Reminder of the Origins of Decorations :

Before becoming purely decorative, bells and markings served practical purposes :

- Locating animals on pastures, particularly in bad weather,
- Identifying herds during and after transhumance,
- Making it easier for livestock farmers and livestock guardian dogs to monitor the herds.







• STEP 5 : ARRIVAL AT THE SUMMER PASTURES : RECEPTION AND SETTLING IN

Activities and Important Considerations Upon the Herds' Arrival

France

- Setting up camps and shepherds' accommodation : installing pastoral huts, fences and water points.
- Initial pasture inspection : identifying areas with good grass and checking access to water.
- Animal care : deworming, vaccinations where necessary, ear marking and hoof checks.
- Watering and initial grazing : guiding the animals towards areas with abundant grass.
- Organising daily work : allocating tasks (herd supervision, milking and fence repairs).
- Cheesemaking on summer mountain pastures (in certain regions) : producing mountain cheeses from sheep's or cows' milk is an important summer activity in the Alps and the Massif Central.
- Festive occasions and rituals : in some valleys, the arrival of herds is still accompanied by local celebrations and social gatherings.

Italy

- Allocation of pastures : shepherds assign summer grazing areas to the herds according to the availability of water and grass.
- Grazing areas and fencing : organising grazing areas and installing protective fencing around water sources.
- Animal care and sorting : as elsewhere, providing basic veterinary care and identifying weak animals.
- Daily pastoral supervision : rotating grazing areas to prevent overgrazing and managing feed availability.
- Dairy production : in mountainous areas, processing milk into local cheeses, ricotta, etc.
- Shepherds' community life : in some cases, shepherds come together to share shelters and resources.



Greece

- Selection of grazing areas and water resources : identifying the richest areas with the help of local shepherds.
- Organisation of herders and dogs : positioning lookouts and livestock guardian dogs.
- Essential animal care : checking for ticks, administering deworming treatments and providing supplementary feed if necessary.
- Milk processing and cheesemaking : local production of traditional cheeses (feta, kasseri, etc.).
- Dialects and oral tradition : the journey to the summer pastures is sometimes accompanied by accounts of the routes and the transmission of traditional knowledge.

Romania

- Settling on the pajiști de munte (mountain pastures) : identifying suitable areas and setting up shelters in the mountain meadows.
- Daily animal care : clinical observations, parasite treatments and adjustments to grazing routes according to weather conditions.
- Salt distribution : traditionally, salt is provided to stimulate appetite and water intake.
- Community tasks : shepherds and families share responsibility for herding, milking and monitoring the animals.
- Music and rituals : pastoral songs and oral traditions sometimes accompany the first weeks on the summer pastures.







Morocco

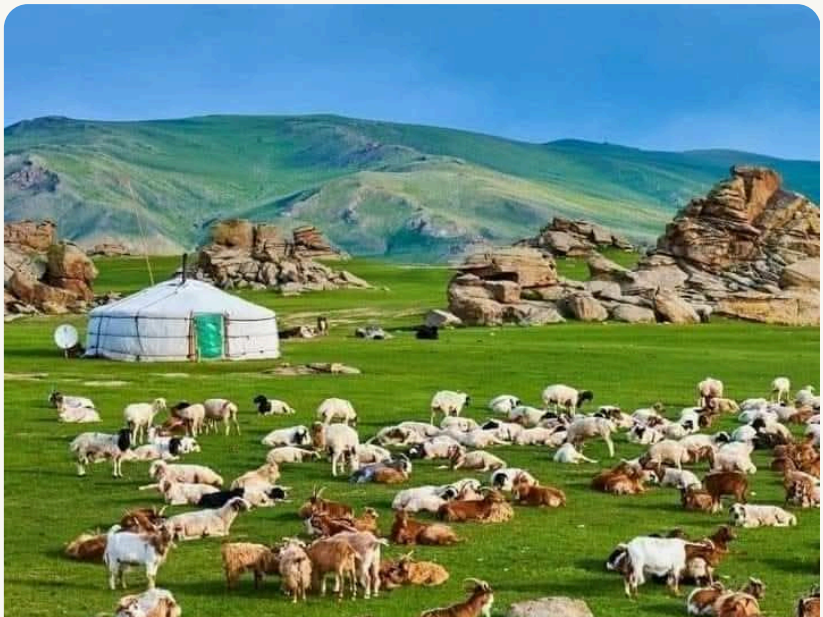
Pastoral transhumance in Morocco is often horizontal or diagonal, between dry areas (plains or plateaus) and mountains (Atlas Mountains). Although less regulated than European Alpine summer grazing, it involves significant seasonal movements.

- Setting up camps : temporarily erecting tents/táza with access to water points.
- Managing water resources : organising routines for watering the animals.
- Mobile herd supervision : often carried out by small groups of shepherds who adjust their routes according to rainfall.
- Animal care : parasite prevention and regular deworming.
- Interactions with local communities : exchanging knowledge and negotiating agreements with villages for access to pastures.
- Additional production : sometimes producing milk or small cheeses, depending on available resources.

Mongolia

Mongolia is one of the few countries where nomadic pastoralism remains deeply rooted. During the summer season (yaylak / johor), nomads move their herds towards higher-altitude steppe pastures.

- Setting up ger (yurts) : erecting mobile dwellings near summer pastures.
- Selecting grazing areas : consulting elders to choose areas according to water availability and grass quality.
- Rotating nomadic herders : several teams often take turns to ensure continuous herd supervision.
- Traditional veterinary checks : screening for parasites and providing natural treatments.
- Nomadic community life : ceremonies and exchanges between families around summer camps.
- Use of milk and dairy products (kumis) : production of fermented mare's milk, which is particularly popular in summer.



Common Features Across Countries

Animal Care Tasks on Arrival :

- Check the herd's general condition (health, injuries).
- Allocate grazing areas to prevent overgrazing.
- Set up shelters, fences and water points.

Animal Care and Production :
Mark animals if necessary and provide veterinary care.
Milk animals regularly and process milk into dairy products (cheese, butter).
Maintain constant supervision (dogs, shepherds).

Sociocultural Aspects :

- Festivals or rituals marking the arrival on the pastures or the pastoral season.
- Community sharing of tasks and knowledge.
- Interactions with villages and local communities.

CHECK LIST
ARRIVAL AND SETTLING THE HERD AT THE GRAZING SITE

On arrival at the grazing site :
secure access to water and grass, and ensure the animals' safety
observe the animals and provide care
organise the work

The key is to pass on knowledge
and to root pastoralism in its cultural heritage and local identity.







CROSS-CUTTING ISSUES

- **MANAGING CONFLICTS OVER LAND USE**

Land

Conflicts over land use are common and share similarities across several of the countries studied.

Examples by Country :

Greece :

- Land is predominantly public and belongs to the State.
- Livestock farmers must lease it to graze their herds or move them across it.
- Collective management ↠ tensions between farmers, as each acts individually within a shared space.

Morocco :

- Conflicts with argan oil producers : herds may eat the fruit of argan trees ↠ economic losses for producers.
- Melkisation : the appropriation of communal land by the State for subsidised irrigated agriculture ↠ a reduction in the land available for transhumance.
- Development of designated areas to accommodate transhumant and nomadic herders in safe, dedicated spaces, away from urban areas and cultivated land, to prevent conflicts (south of Agadir).

Mongolia and France : similar tensions over access to pastures and grazing rights.



Water

Water is vital for herds and is becoming a source of conflict, particularly due to climate change and the increasing scarcity of water sources.
Water has always been a determining factor in transhumance routes and livestock health. Climate change, urbanisation and the expansion of cultivated land near water sources have therefore restricted access to water in certain regions.

Exemples par pays :

Morocco & Mongolia : Significant pressure on water sources ↠ potential conflicts between livestock farmers or with other land users.

France & Greece : Tensions are less pronounced, but vigilance is needed during dry periods or on shared pastures.

- The schedule follows forage cycles : herds move towards cooler, grass-rich areas and return when resources decline.
- Supplementary feed (hay, mineral supplements) may be needed on stages where forage is insufficient.
- Water availability guides the strategy : natural water sources (springs, rivers, lakes), wells and boreholes, flexible water tanks or tanker trailers.
- During hot weather, plan to water the animals in the morning and evening and provide rest stops in the shade.

France — Towed water tanks in summer along dry routes ; water sources mapped by pastoral services.

Italy — Water troughs installed along certain tratturi ; planning journey stages according to water availability.

Grèce — Watering during the cooler hours ; responsible use of communal water sources ; minimising evaporation losses.

Roumanie — Access to rivers and village water troughs ; supplementary feeding when grass is scarce in late summer.

Maroc — Wells and irrigation channels (séguias) ; sometimes water delivery or local desalination in the South ; vigilance regarding animal health during hot weather.

Mongolie — A strategy centred on wells and seasonal rivers ; longer journeys during droughts or dzuds.

Solutions Applied by Country :

Changing the Route :

- Changes the planning and preparations and requires more extensive organisation.
- **France, Italy, Greece and Romania :** used to follow available water sources.
- **Morocco and Mongolia :** routes are guided by environmental conditions rather than fixed roads.

Drilling :

- Drilling wells at stopping points along the route to provide water for livestock.
- Only applicable if the same stopping points are used from one year to the next.
- Used in **France, Italy, Romania, Greece and Mongolia.**

Water Transport :

- Water tanks transported along the transhumance route or to stopping points.
- **Morocco :** during periods of drought, the Ministry of Agriculture systematically implements emergency livestock watering programmes (deployment of water tankers).







Predation and Theft

Herds are exposed to predators and theft during transhumance :

- Travelling through unfamiliar and isolated areas without shelter.
- Difficulty monitoring herds over long distances.

Consequences :

- Animals killed, injured or stolen,
- Stress within the herd ↠ abortions and reduced production,
- Economic losses for livestock farmers.

Examples by Country :
France & Italy : attacks by wolves and stray dogs.
Morocco & Mongolia : attacks by wild animals and livestock theft.
Romania : frequent attacks by bears and wolves.

Predator species and the level of risk vary between regions, but this is a **common problem** in all the transhumant countries studied.

Other predators vary according to the region and natural environment :

- **Europe :** wolves, bears, foxes, stray dogs and sometimes lynx.
- **Morocco :** jackals, stray dogs and sometimes local predators such as the caracal.
- **Mongolia :** wolves, foxes, small wild cats and endemic predators.



Tourism

Transhumance sometimes passes through **tourist areas** (villages, trails and mountainous areas), which can create conflicts over land use between livestock farmers and visitors.

Countries concerned :
France, Greece, Romania and Italy ↠ highly attractive destinations with large numbers of tourists during the summer.

Problems Encountered :

- **Coexistence with livestock guardian dogs :** some tourists and hikers approach herds too closely ↠ possible aggressive reactions, complaints or accidents.
- **Traffic and local disruption :** slow-moving traffic, congestion and difficulties accessing shops and homes.
- **Noise from bells and barking :** perceived as a nuisance by local residents unfamiliar with pastoral practices.
- **Condition of roads and paths** : animal droppings, mud, potholes and temporary damage.

Causes of Tensions :

- Often due to a lack of awareness and understanding between traditional agricultural practices and modern tourism.

Countries Where Tourism Is Less of an Issue :

- **Morocco and Mongolia :** transhumance areas are less frequented by tourists, and tensions are virtually non-existent.







In Summary : Conflicts Over Land Use, Predation & Mediation

Tensions centre on access to land and water, the protection of crops and orchards, the sharing of tourist trails and wildlife (wolves, bears and stray dogs).

Prevention is the priority : local agreements, information meetings, guidance for other land users, livestock guardian dogs, herd supervision, electric fencing and maintaining an incident register. Documenting incidents and promptly addressing damage helps prevent tensions from escalating.

Public policies are evolving (e.g. the status of large predators in Europe), making regular monitoring essential.

France — Coexistence with wolves : protection measures and financial support ; importance of raising awareness among hikers and local residents.

Italy — Good-neighbour agreements with municipalities ; festive processions along the tratturi involving local communities.

Greece — Management of communal resources to prevent overgrazing ; municipal mediation and rotation of grazing areas.

Romania — Occasional conflicts involving bears and wolves ; coordination with forest rangers and associations.

Morocco — Competition with argan-growing areas : protection of young trees, designated livestock corridors and restrictions on access to fruit during certain periods.

Mongolia — Pressure on wells ; negotiations between camps and customary rules governing priority of access.



• ADAPTATIONS TO CLIMATE CHANGE

For several years, climate change has been forcing transhumant livestock farmers to adapt their practices :
- Adjusting transhumance dates (departure or return),
- Adapting to rainfall, the abundance of forage resources and water availability,
- Maintaining flexibility to maximise the effectiveness of transhumance and ensure livestock health.

Dietary Transitions

Forage resources are directly affected by the climate : their abundance, quality and growth cycles depend on numerous factors linked to climate change.



In the appendices, you will find plant fact sheets for each country (forage plants grazed by livestock).

Examples by Country :

France :
Some livestock farmers leave hay bales at stopping points where forage is scarce.
- Advantage : helps maintain the herd.
- Limitation : winter fodder reserves are depleted ↠ purchasing additional hay may be necessary.

Mongolia :
- The route is determined by the availability of forage resources.
- If sufficient forage is available, the herd remains in place.
- Transhumance continues only when forage becomes insufficient.

• ADDING VALUE TO PRODUCTS

Transhumance contributes to the production of a wide range of dairy and meat products, but their recognition and added value vary from country to country.

Morocco : these products are mainly intended for local consumption by families or neighbours and are not marketed on a large scale.

Italy : some products from transhumance are promoted under specific brands and benefit from a dedicated label, particularly certain lambs that have undergone seasonal transhumance.

France, Greece, Romania, Morocco and Mongolia : products derived directly from transhumance are not fully recognised. There is no specific label that sufficiently highlights transhumance as a livestock farming practice, beyond general labels such as Organic, PDO and PGI, including PGI Pyrenean Lamb (60% of producers practise transhumance), or other European certifications.

In these countries, added value is based primarily on local terroir and the altitude of the pastures, rather than the distance travelled or the work carried out by the herds and livestock farmers.

- **COMMUNICATION, EDUCATION & CULTURAL PROMOTION**

Inform the public (notices at town halls, posts by municipalities, interactive maps), explain the role of livestock guardian dogs (do not pet them, walk around the herd), and, where appropriate, organise a festive event along the route (farmers' market, educational workshops).

Promoting traditional skills and practices (milking, cheesemaking, animal adornments and bells) helps build public acceptance.

France — Transhumance festivals in the Alps and Pyrenees ; pastoral museums and ecomuseums, Maison de la Transhumance.

Italy — Cultural events along the tratturi ; interpretive trails (information panels, guided tours).

Greece — Village festivities ; cheesemaking demonstrations and traditional songs.

Romania — Pastoral fairs ; promotion of summer pasture cheeses and life in the stână.

Morocco — Agropastoral festivals ; involvement of women's argan cooperatives ; local crafts.

Mongolia — Stories of nomadic life shared at local festivals ; equestrian and cultural demonstrations.

- **ESTIMATED BUDGET & STRATEGIC PURCHASES**

The budget covers labour (shepherds/assistants), dogs (purchase, veterinary care and food), travel (fuel and tolls), equipment (fencing, electric fence energisers, water tanks and hoses), consumables (dressings and marking materials), accommodation (gîtes/bivouacs), communication and a contingency fund (5–10%). Co-funding may come from local authorities, parks, rural development programmes, foundations or agricultural sectors (PDO/PGI cheeses).

 **France —** Public funding (predation protection, regional support schemes).

 **Italy —** Regional support, intangible cultural heritage and cultural routes ; local sponsorship may be available.

 **Greece —** Municipal support for allocated pastures ; moderate fees and collective works.

 **Romania —** Payments through APIA ; community investment in communal resources (water troughs, paths).

 **Morocco —** Technical support from ANOC ; microcredit ; adding value to products (lamb, milk, argan).

 **Mongolia —** Rural development projects for water sources, animal health and climate resilience.

TRANSHUMANCE ON FOOT : A POWERFUL WAY TO BUILD SOCIAL CONNECTIONS ACROSS REGIONS

Transhumance on foot is not simply the movement of herds between two pastures. It is a deeply social practice, an opportunity to share knowledge, bring people together and build collective identities. Across the world, it reveals a common thread : wherever it is still practised, it creates connections — between livestock farmers, between generations, and between people and their territories.

A Practice That Brings People Together Beyond Work

Walking with animals requires a slow, collective and shared pace. This extended time together encourages exchanges :

- between livestock farmers (mutual support, sharing experiences),
- between generations (passing on practical skills, routes and stories),
- with local residents encountered along the route.

Transhumance thus becomes a mobile social space where work and conviviality come together. Rest stops, shared meals and welcomes in villages all provide opportunities to strengthen human connections.

A Living Culture Shared Across Countries

France

In France, particularly in the Alps, the Massif Central and the Pyrenees, transhumance on foot has often become a festive event. It attracts local residents, tourists and volunteers. Some long-distance transhumance journeys on foot (over 150 km) continue or are being developed in certain regions, demonstrating the importance of this practice as part of a sustainable livestock farming system.

- Departures and arrivals are often celebrated (transhumance festivals).
- Local authorities are involved.
- It creates strong connections between rural and urban communities.
- Awareness-raising activities are organised as herds pass through villages.

The shepherd becomes a cultural mediator as well as a livestock farmer.

Romania

In the Carpathians, transhumance remains a living tradition that plays a central role in community life.

- Pastoral communities operate through networks of mutual support.
- Routes are passed down from generation to generation.
- Shepherds often live together for several months.

Here, social bonds within the group are very strong, almost like family ties.

Italie

The Tratturi : Living Routes That Continue to Build Social Connections

The tratturi remain major features of Italy's pastoral landscape, particularly in Abruzzo, Molise and Apulia. Although they no longer carry the large numbers of herds they once did, they remain active routes for transhumance on foot and social connection, becoming places where people come together.

A Network That Still Exists and Remains Partly in Use

The main routes (such as the Tratturo Magno L'Aquila–Foggia) are still visible, accessible and, in some sections, used for transhumance.

- Some livestock farmers continue to move their herds along them on foot, often over shorter sections.
- The routes are also used for symbolic, educational or collective transhumance events.
- Their role has evolved : from major economic routes to multifunctional corridors (pastoral, cultural and social).

Places Where Social Connections Continue to Thrive

Stopping points (jazzi, fountains and shepherds' huts) remain familiar landmarks that are still in use.

During transhumance today :

- livestock farmers meet one another,
- local residents welcome the herds,
- walkers and volunteers take part.

These social connections remain strong, but they are now more inclusive, extending to people outside the livestock farming community.









Changing Governance and a Reshaped Social Economy

- The former centralised system has disappeared,
- but regions, natural parks and associations have taken over :
  - protecting the routes,
  - organising events,
  - mediating between different users.

Social connections are no longer imposed by a pastoral administration ; they are built collaboratively at local level.

- There are fewer jobs directly linked to transhumance than in the past, but new activities are developing :
  - agritourism,
  - promotion of pastoral products,
  - local events.

Social connections remain very real, but they are now part of a more diversified economy.

The tratturi are not static relics : they are still active routes whose function has evolved. Once major economic corridors, they have become routes for transhumance on foot, cultural promotion and the renewal of social connections between livestock farmers, local residents and civil society.

Greece

Transhumance That Connects Dispersed Communities

Transhumance on foot is particularly prominent among groups such as the Sarakatsani and Vlachs, who move seasonally between plains and mountains (Pindus, Macedonia and Thessaly). These routes connect two worlds. Extended family organisation plays a much greater role than in other countries and often involves entire family units.

Roles are divided :

- men : herding livestock,
- women : processing products and managing domestic life,
- children : gradually taking part.



Here, social bonds are deeply rooted in family and intergenerational relationships, functioning as a "seasonal social network" long before the term existed.

A Strong and Visible Cultural Dimension

- Departures and returns are marked by festivals, music and dancing.
- Traditional costumes may be worn on certain occasions.
- Oral transmission plays a very important role (songs, stories and pastoral knowledge).

Social connections are evolving towards hybrid forms : tradition, tourism and education.

Morocco

In the Atlas regions, transhumance on foot is a cornerstone of social organisation.

- It is based on tribal systems and collective rules governing access to resources.
- Movements are negotiated between groups.
- Hospitality plays a central role.

Here, social connections also have a political dimension : they shape how territories are managed.

Mongolia

In Mongolia, although movements may cover greater distances, walking remains part of certain stages.

- Nomadic livestock farmers live in a state of strong interdependence.
- Mutual support is essential in the face of climatic conditions.
- Encounters between nomadic families punctuate their journeys.

Transhumance shapes every aspect of social and cultural life.

A Means of Fostering Openness and International Cooperation

In a contemporary context, transhumance on foot is also becoming :

- a tool for cooperation between countries (exchanges of pastoral practices),
- a basis for educational and cultural projects,
- a driver of local development (sustainable tourism and promotion of local territories)

It helps build bridges between pastoral cultures while promoting traditional skills and knowledge that are often under threat.

Current Challenges Facing Social Connections in Pastoral Communities

Despite its rich social value, transhumance faces several challenges :

- the gradual disappearance of certain routes,
- the declining number of shepherds,
- administrative and land-related constraints,
- the growing disconnect between society and livestock farming.

Strengthening social connections through transhumance therefore requires :

- recognition of its cultural value,
- support for transhumance on foot,
- involvement of citizens and institutions.

On foot, transhumance slows the pace of life and brings people closer together. Whether it crosses the French mountains, the Romanian plains, the Italian tratturi, the Greek mountains, the Moroccan plateaus or the Mongolian steppes, it embodies the same reality : living social connections, constantly evolving and deeply rooted in local territories.

It is not merely a journey — it is an encounter.

TRANSHUMANCE, MOBILE PASTORALISM AND THE SUSTAINABLE DEVELOPMENT GOALS – FAO REFERENCES



- **SDG 1 – NO POVERTY**

Transhumance provides a livelihood for thousands, if not millions, of pastoral livestock farmers around the world. According to the FAO, pastoralism is a “sustainable production system” that supports the livelihoods of rural communities, particularly in marginal areas.

By recognising and supporting pastoral mobility, policies can help reduce rural poverty.

- **SDG 2 – ZERO HUNGER**

Transhumant herds produce animal-source foods (meat and milk) that are essential to the food security of many populations, particularly in arid and semi-arid regions.

Through its flexibility, pastoralism allows production to adapt to seasonal resources and climatic variations, ensuring a more resilient food supply.

- **SDG 13 – CLIMATE ACTION**

Livestock mobility is a strategy for adapting to climate change : pastoralists move their animals according to the availability of pastures and water sources, enabling them to cope with climate-related shocks (droughts and seasonal variability).

Through its Pastoralist Knowledge Hub, the FAO advocates for the right to mobility, which is crucial to the climate resilience of pastoral systems.

- **SDG 15 – LIFE ON LAND**

Pastoral systems contribute to the conservation of grazing ecosystems : through extensive and mobile grazing, herds contribute to soil regeneration, pasture biodiversity and the restoration of soil fertility.

Pastoralism also plays a role in sustainable land management, helping to prevent land degradation when mobility is properly managed.

- **SDG 16 – PEACE, JUSTICE AND STRONG INSTITUTIONS**

The FAO emphasises that pastoral governance — including flexible land tenure systems and customary mechanisms — is essential for security and social cohesion.

In some regions, pastoral mobility can contribute to strengthening peace, particularly when it is properly managed and legally recognised.

- **SDG 17 – PARTNERSHIPS FOR THE GOALS**

The FAO Pastoralist Knowledge Hub promotes policy dialogue at different levels (local, national and international) to defend pastoralists' rights and their mobility.

Institutional recognition of pastoral systems (through the FAO, governments and communities) strengthens collaboration between stakeholders (pastoralists, local authorities and international organisations).

- **WHY IT IS IMPORTANT TO MAINTAIN TRANSHUMANCE IN RELATION TO THE SDGS**

Transhumance is not only a cultural heritage : it is a practical driver of sustainable development.

It supports the livelihoods (SDGs 1 and 2) of thousands of livestock farmers, often in vulnerable situations, by providing them with income and food.

It strengthens climate resilience (SDG 13) : by moving, herds adapt their grazing to available resources, helping them cope with environmental variations.

It contributes to land conservation (SDG 15) : through extensive grazing, pastoralists help maintain biodiversity and restore ecosystems.

It plays a social and political role (SDG 16) : recognising transhumance means acknowledging pastoralists' rights and traditional institutions, while promoting sustainable governance.

Finally, maintaining strong partnerships (SDG 17) between pastoral communities, governments, NGOs and international organisations helps support and sustain the structures required for this mobility.

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- SIMILARITIES BETWEEN COUNTRIES

Themes	Similarities
Animal Health and Environmental Risks	All countries include animal health monitoring of herds before transhumance, using either traditional practices (Mongolia, Greece) or institutional procedures (Italy, Romania, Morocco).
Climate Risks	Each country adapts routes or schedules according to weather conditions ; water is a key factor.
Animal preparation	In all cases, the animals are either naturally adapted (Mongolia, Greece) or prepared for walking through training or careful monitoring (Italy, Morocco, Romania). The same applies to those accompanying the herds !
Foot and Hoof Care	Foot and hoof care is recognised as essential, even though it is carried out more systematically in Europe.
Equipment	Use of means adapted to the local context : pack animals or support vehicles depending on the terrain.
First-Aid Kit	A basic veterinary first-aid kit is used in all countries, combining traditional knowledge with modern medicine.
Human Preparation	Transhumance is practised by families or specialised shepherds. Some form of intergenerational knowledge transmission is found in all countries.
Authorisations and Coordination	All countries mention the need for authorisations or coordination with local authorities or other users.
Fallback Points	All countries provide for alternative routes or fallback areas in the event of a crisis or drought.

ANNEXES

- DIFFERENCES BETWEEN COUNTRIES

Themes	Différences majeures
Animal Health and Environmental Risks	Mongolie et Grèce font davantage appel à des pratiques traditionnelles ; Italie et Roumanie sont très encadrées par les services vétérinaires publics.
Climate Risks	Mongolia faces “dzuds” ; Italy and Romania face unexpected rainfall ; Greece and Morocco face heat and drought.
Animal preparation	In Mongolia, movements are frequent, so no specific training is required. Elsewhere, animals are often physically conditioned before transhumance.
Foot and Hoof Care	Italy, France and Romania are the most rigorous. Foot and hoof care is less systematic in Greece and Morocco.
Equipment	Use of yurts and pack animals in Mongolia ; quad bikes or trucks in Italy ; traditional equipment remains in use in Greece.
First-Aid Kit	Italy and France have professional support systems ; in Mongolia and Greece, there is greater reliance on traditional medicine.
Human Preparation	In Italy and France, shepherds may be employed and professionally trained ; elsewhere, the practice is more family- or community-based.
Authorisations and Coordination	In France, Italy and Romania, authorisation requirements are stricter. In Greece and Mongolia, routes are less regulated, although customary rules still apply.
Fallback Points	Systems are more organised in Romania and Italy, with networks of summer mountain pastures ; they are more flexible in Mongolia and Morocco.

TECHNICAL ARGUMENTS FOR SUSTAINING OR STARTING TRANSHUMANCE

ANNEXES

• TECHNICAL ARGUMENTS FOR SUSTAINING OR STARTING TRANSHUMANCE

1. Optimising the Use of Natural Resources

- Transhumance enables optimal use of seasonal pastures : summer mountain pastures and winter lowland pastures.
- It prevents local overgrazing, promotes the natural regeneration of vegetation and helps prevent soil erosion.
- It allows adaptation to climatic and rainfall variations, particularly in semi-arid or mountainous areas (Morocco, Mongolia, Romania).

2. Economic Resilience and Food Security

- It enables the sustainable and regular production of meat, milk, cheese and wool, even in marginal areas where sedentary agriculture is limited.
- It provides a stable income and reduces the vulnerability of pastoral families to climate-related hazards.
- By integrating products into local supply chains or quality schemes (organic, PGI, mountain cheese), it is possible to create added economic value.

3. Ecosystem and Biodiversity Conservation

- Transhumant herds help maintain open and semi-natural landscapes, which are essential for local flora and fauna (SDG 15).
- Pastoral mobility preserves ecological corridors, limits scrub encroachment and contributes to ecological resilience.
- The practice supports the preservation of local livestock breeds adapted to the specific conditions of each territory.

4. Transmission of Knowledge and Cultural Heritage

- Transhumance is an age-old form of know-how, encompassing herd management, the management of pastoral routes, traditional craftsmanship and seasonal rituals.
- Sustaining this practice means preserving cultural memory and pastoral traditions, promoting the identity of local areas and strengthening social cohesion.
- Transhumance festivals and historic routes provide opportunities to develop cultural and sustainable tourism.

5. Alignment with the Sustainable Development Goals (SDGs)

- SDGs 1 & 2 : poverty reduction and food security through livestock production adapted to local resources.
- SDG 13 : adaptation to climate change through seasonal mobility.
- SDG 15 : conservation of pastures and steppe or mountain ecosystems.
- SDGs 16 & 17 : strengthening local governance, promoting pastoral rights and fostering sustainable partnerships.

ANNEXES

- **TECHNICAL ARGUMENTS FOR SUSTAINING OR STARTING TRANSHUMANCE**

6. Country-Specific Benefits

- France : maintenance of heritage landscapes (Causses and Cévennes), with opportunities to promote tourism and agricultural products.
- Italy : preservation of historic tratturi, sustainable use of Mediterranean pastures and short supply chains for local products.
- Greece : maintenance of mountain pastoral systems, transmission of ancestral knowledge and preservation of grassland biodiversity.
- Romania : preservation of the cultural identity of rural communities, maintenance of semi-natural grasslands and local breeds.
- Morocco / Mongolia : adaptation to extreme climates, sustaining rural populations in arid or steppe areas, and preservation of traditional pastoral knowledge.

7. Strategic Opportunities

- UNESCO / ICH inscription or recognition can facilitate access to funding, grants or international partnerships.
- The practice can be integrated into local sustainable development plans, agri-environmental programmes or quality schemes.
- Transhumance can be a means of promoting and raising the profile of local areas, helping to raise awareness of biodiversity, pastoral cultures and sustainable agriculture.

In Summary for the Project Leader

- Transhumance is a multifunctional tool : ecological, economic, social and cultural.
- It enables sustainable production, strengthens climate resilience, conserves ecosystems and promotes ancestral know-how.
- Adopting or sustaining it means investing in a project with high added value for the community, the territory and the sustainability of pastoral systems.

COUNTRY FACT SHEETS

FRANCE

GREECE

ITALY

MOROCCO

MONGOLIA

ROMANIA

STAGES OF TRANSHUMANCE IN FRANCE



ADMINISTRATIVE PREPARATION

Administrative preparation aims to provide a legal framework for transhumance and ensure the safe movement of the herd.

Certain procedures are mandatory before departure. In particular, the livestock farmer must apply to the prefecture for authorisation to move the herd. The prefecture then forwards the information to the various stakeholders concerned : for safety and prior information, the gendarmerie and the municipalities crossed ; and for agricultural matters, the Departmental Livestock Establishment (EDE) and the DDT (Departmental Directorate for Territories).

In the case of summer grazing, authorisation must also be requested from the Animal Health Protection Group (GDS). This organisation checks that the herd complies with animal health requirements, particularly by ensuring that it is free from disease through prophylactic health checks.

The livestock farmer must also declare herd movements to the EDE when animals are moved to summer pastures.

The administrative timetable must be carefully observed. For summer or winter transhumance, the declaration to the prefecture must be submitted two months before departure. In addition, herd movements must be declared no later than seven days after arrival at the summer pastures.

Movement authorisations are required when using roads, certain tracks or travelling over long distances. They are issued by the prefectures.

Access to resources, particularly grazing areas, also requires administrative procedures. Requests must be submitted to private landowners or municipalities. In this context, partnerships can be developed between arable farmers and livestock farmers, particularly within the framework of Common Agricultural Policy (CAP) schemes.

An important point to highlight is that host farmers are often supportive of this type of practice, which forms part of a mutually beneficial approach to territorial cooperation.

In France, transhumance is subject to administrative regulations and must be officially declared. Preparation aims to anticipate, organise and ensure the safe movement of the herd throughout the entire route.

STAGES OF TRANSHUMANCE IN FRANCE

ANIMAL HEALTH PREPARATION

Animal health preparation aims to limit the risk of disease, protect animal health throughout the journey and ensure that the herd can travel without problems, particularly in isolated areas where access to veterinary care is more difficult.

Animal health monitoring is an essential step before departure. A complete health check must be carried out to assess the animals' general condition, ensure that they are free from transmissible diseases and verify their ability to cope with the journey.

Hoof trimming should be carried out one to two months before departure to prevent lameness during the journey.

It is also essential to comply with national animal health requirements. Each livestock farmer must be monitored by an authorised veterinarian and carry out mandatory prophylactic measures, which involve screening for regulated diseases in order to ensure the herd's good health status. These checks are often a prerequisite for movement authorisation, particularly for transhumance or movement to summer pastures.

Animal identification and traceability must be rigorously ensured. Each animal must be properly identified and health documents must be kept up to date, making it possible to track movements and limit the risk of disease transmission.

Biosecurity must also be anticipated, particularly when several herds meet along the route or during the ascent to the mountains. Close contact between animals from different farms can facilitate the transmission of diseases or parasites. It is therefore important to limit high-risk contact, monitor the introduction of new animals and apply appropriate hygiene measures.

Planning for animal care is essential, especially in isolated areas. A complete first-aid kit must be prepared before departure. It generally includes antibiotics (broad-spectrum and specific), anti-inflammatory medicines, injection equipment, hoof-care products and nutritional supplements, such as rehydration solutions or calcium.

Finally, the herd must be monitored daily throughout the transhumance period. This makes it possible to quickly detect any signs of injury, excessive fatigue or illness, so that action can be taken as early as possible and the condition can be prevented from worsening.







STAGES OF TRANSHUMANCE IN FRANCE

PREPARING THE JOURNEY

Developing a transhumance project requires precise and advance planning, which is essential to limit unforeseen events and ensure that the journey runs smoothly.
Studying the route is an essential step. This can be done using digital tools such as Google My Maps, which make it possible to map the route, identify crossing points and visualise the different types of environments, such as grasslands, cultivated land, wooded areas and residential areas. Reference points can also be added to indicate arrival and departure times, as well as resources available along the way, such as water, food supplies or shops.
The next step is to draw up a detailed provisional schedule. This includes daily stages, the rest periods required by the herd and intermediate grazing areas.
It is also important to take into account the animals' travelling capacity. Sheep and goats cover an average of 10 to 15 kilometres per day, while cattle can travel 25 to 30 kilometres per day. These guidelines make it possible to adapt the total duration of the journey and the workload, while limiting animal fatigue.
Transport logistics must be chosen according to the distance to be covered, the terrain and the accessibility of the routes. Several options are possible : travelling on foot, which remains the traditional method, but also using a truck or livestock vehicle, or even a tractor.
Logistical support may be required depending on the circumstances. This may include the use of 4x4 vehicles or, more exceptionally, horses or donkeys.
Human and material organisation is also essential. It is recommended to have at least four people to supervise the herd, as well as one vehicle at the front and, in some cases, another at the rear. The use of walkie-talkies facilitates communication between those involved. Road signs and a flashing beacon help ensure safety when travelling on roads.
Equipment for supplying water must be provided, such as buckets and water containers, depending on the number of animals. A tent may also be required for overnight accommodation along the route.
Whenever possible, it is advisable to use old transhumance routes, such as certain sections of the Camino de Santiago, which are often well suited to this type of movement.
Finally, meals along the route must be organised for those accompanying the herd, as part of the overall planning required to ensure that the transhumance runs smoothly.





STAGES OF TRANSHUMANCE IN FRANCE

THE ANIMAL

Animal and herd management aims to adapt the animals to the physical, nutritional and climatic constraints encountered throughout transhumance.

The choice of breeds is crucial. It must meet several essential criteria, such as hardiness, the ability to adapt to difficult environments, feeding autonomy and endurance when walking. Local breeds are particularly well suited, as they have long been selected to match the specific conditions of their territory.

In France, several examples clearly illustrate this adaptation. Sheep breeds include the Manech, Tarasconnaise and Mérinos d'Arles. For cattle, breeds such as the Gasconne, Salers and Abondance are recognised for their hardiness and suitability for transhumance.

Feeding is mainly based on making use of the natural and diverse resources available along the route. These primarily include vegetation in ditches and along roadsides, as well as natural grasslands rich in a variety of plant species during stops or daily rest periods.

Access to water is crucial. It must be anticipated throughout the route, as the animals' water requirements increase with physical exertion and climatic conditions.

Herd management relies on an essential balance between people, dogs and animals. This three-way relationship is at the heart of successful transhumance.

The herding dog plays a key role in managing herd movements. Its training is progressive : it begins with basic obedience commands, followed by specific training for working with livestock. It generally becomes fully operational between two and three years of age.

The livestock guardian dog, meanwhile, is responsible for deterring predators such as wolves. Breeds such as the Pyrenean Mountain Dog (Patou) are commonly used for this purpose.

The herd must be monitored constantly. Bells make it easier to locate animals, particularly in difficult or wooded terrain, and alert the local population to the arrival of the herd. Daily monitoring is essential to quickly detect any problems (injuries, fatigue or animals becoming separated from the herd).

Certain practices, such as shearing (for sheep) and animal marking, facilitate herd management, identification and monitoring throughout transhumance.







STAGES OF TRANSHUMANCE IN FRANCE

ARRIVAL AND SETTLING OF TRANSHUMANT HERDS AT SUMMER PASTURES OR GRAZING AREAS

Arrival in the mountains aims to establish a functional and secure pastoral system for the entire period spent there.

As soon as the herd arrives, careful organisation is required. The herd is generally gathered in an enclosure, which means that mobile pens must have been prepared in advance. This stage makes it possible to count the animals accurately and check that none are missing after the journey. This count is essential to ensure proper herd monitoring and provide the shepherd with reliable information from the beginning of the summer grazing period.

Animal marking is also important. Markings indicating the name of the mountain grazing area and the livestock farmer are applied beforehand. This marking facilitates animal identification, particularly when several herds are grouped together.

Technical arrangements include setting up appropriate equipment. Mobile fencing is essential : it is used to create night enclosures, handling areas and isolation areas for sick or injured animals. Other equipment, such as handling pens, allows animals to be handled safely.

The transport of equipment depends on access conditions in the mountains. Equipment can be transported by vehicle where possible, but also using pack animals (horses or donkeys) or, in the most difficult-to-access areas, by helicopter.

The first few days in the mountains are an adaptation period for the herd. The animals must become accustomed to a new environment, different vegetation and sometimes harsher climatic conditions. Closer monitoring is therefore necessary to quickly detect any problems (stress, loss of body condition or animals becoming separated from the herd).

Grazing management requires careful organisation of herd movements. Grazing circuits are defined and grazing areas are rotated in order to prevent overgrazing and preserve natural resources and soils.

In France, many summer pastures are managed collectively through pastoral groups. These organisations bring together several livestock farmers who pool their animals to graze on the same area. The group is responsible for overall organisation : allocation of animals, management of grazing areas, maintenance of equipment and, in some cases, the employment of a salaried shepherd.







STAGES OF TRANSHUMANCE IN FRANCE

ARRIVAL AND SETTLING OF TRANSHUMANT HERDS AT SUMMER PASTURES OR GRAZING AREAS

Each livestock farmer entrusts their herd to the pastoral group for the duration of the stay in the mountains, while retaining ownership of their animals. The system operates according to collectively agreed rules established in advance (dates for moving up to and down from the summer pastures, stocking rates and financial contributions). This system makes it possible to pool resources, make better use of mountain areas and facilitate the management of large herds.
The success of the summer grazing period ultimately depends on daily observation and a constant ability to adapt. The shepherd adjusts practices according to the condition of the herd, weather conditions and changes in available forage resources.





ISSUES RELATED TO CONFLICT MANAGEMENT

Transhumance, as a practice involving the seasonal movement of herds, lies at the intersection of several environmental, agricultural, economic and social issues.
From an environmental perspective, it directly contributes to sustainable development objectives, particularly by promoting more responsible production, supporting adaptation to climate change and preserving biodiversity. Moving animals allows grazing pressure to be distributed more evenly over time and across different areas, thereby limiting overgrazing, promoting soil regeneration and maintaining open habitats. It also makes use of natural resources that would otherwise be difficult to exploit, while limiting the use of inputs and the transport of animal feed, thereby helping to reduce the carbon footprint of livestock farming systems.
From an agricultural perspective, transhumance provides a practical response to current constraints, such as water shortages or a lack of forage during the summer. It offers an alternative or complement to sedentary livestock farming systems by helping to secure feed supplies for herds through mobility. It therefore contributes to the resilience of farms in the face of climate-related hazards.
The economic issues are also significant. Transhumance contributes to adding value to agricultural products through quality schemes such as PDO, AOC or PGI (for example, PGI Pyrenean Lamb, where 60% of farms practise transhumance), which are often associated with extensive farming practices and strong territorial roots. It can improve product quality, particularly meat quality, through a more diverse and natural diet.

ISSUES RELATED TO CONFLICT MANAGEMENT

However, this practice also involves constraints, particularly those related to predation. Losses can be direct, through attacks on animals, but also indirect, through stress within the herd, which can affect animal health and performance. To address these issues, support schemes are available, particularly under the CAP 2023–2027, to fund protection measures such as livestock guardian dogs, fencing, herd supervision and technical support.

Finally, transhumance involves significant social and territorial issues. It contributes to enhancing the recognition of livestock farming and shepherding professions, which require specific skills related to managing herds on the move. It also involves coexistence with other users of the areas crossed, such as local residents, local authorities and tourists, which requires organisation and communication.

Beyond its technical and economic dimensions, transhumance also helps strengthen social connections. The movement of herds creates exchanges between territories, encourages interaction between livestock farmers, local residents and other local stakeholders, and is often part of collective initiatives. It therefore contributes to keeping traditions alive while strengthening rural and territorial solidarity.

Large Predators (Mainly Wolves)

In France, predation pressure from wolves remains significant and is increasing in some areas. In 2025, approximately 4,441 attacks were recorded, resulting in nearly 12,927 animals being killed, the majority of them sheep.

The impacts are not only direct (animals killed), but also indirect :

- stress within the herd
- abortions
- loss of body condition
- changes in behaviour (refusal to graze in certain areas)

It should also be noted that attacks can now occur even in the presence of people or during the daytime, making herd management while on the move more difficult.

Stray or Roaming Dogs (Often Underestimated)

Dogs are a genuine cause of predation, particularly in peri-urban or agricultural areas.

A dog attack results in several animals being killed on average (around 6 per attack).

The damage can be significant, as dogs often attack through play or chasing behaviour, causing multiple injuries or widespread stress within the herd.

Recent cases show that entire herds can be severely affected, or even decimated, by repeated attacks.

Dog attacks are more unpredictable and often occur close to residential areas or along routes used by livestock. They therefore require particular attention during transhumance (when crossing villages, roads and busy areas).

Other Sources of Disturbance or “Indirect Predation”

Even without a direct attack, other factors can disturb the herd :

- hikers’ dogs that are not kept on a lead
- opportunistic wildlife (foxes preying on young animals, etc.)
- human disturbance (tourists, mountain bikes, vehicles)

ISSUES RELATED TO CONFLICT MANAGEMENT

These disturbances can lead to :

- herd dispersal
- falls or injuries
- significant stress, particularly while the herd is on the move

What This Means for Transhumance

When moving the herd, these risks require :

- increased monitoring, particularly in high-risk areas (residential areas, forests, tourist areas),
- the use of livestock guardian dogs and herding dogs,
- the establishment of secure night enclosures,
- particular vigilance during stages and rest stops.

Predation during transhumance is therefore not limited to large carnivores. Stray or roaming dogs can also pose a risk, particularly when passing close to inhabited areas. However, transhumance relies on well-established and proven know-how : the presence of the shepherd, the role of the dogs and anticipating potential situations make it possible to manage these risks effectively. This ability to adapt is an integral part of the profession and contributes to the richness and modern relevance of the practice.



STEPS FOR TRANSHUMANCE IN GREECE



ADMINISTRATIVE PREPARATION

In Greece, the movement of the flock is declared to the Regional Veterinary Directorate, which issues the Animal Movement Permit.The route is determined based on traditional paths that have been used for generations.There is no official notification of families or local farmers, but they informally know that every year, from late August to early November, the flocks descend from the mountains.



HEALTH PREPARATION

Preliminary analysisA health inspection is carried out as part of the Animal Movement Permit by the Regional Veterinary Authority.The inspection also includes checking the vaccination program of both the sheep and the livestock guardian dogs.

Veterinary first aid kit

The flock is accompanied by a basic veterinary kit, which includes:

- A poisoning emergency kit for dogs, for immediate first response until a veterinarian can intervene.
- Splints for sheep in case of leg injuries.
- Basic medicines for sheep, such as an antibiotic for emergency use (under veterinary guidance).
- Products that help stabilize animals that may have consumed toxic plants, until proper treatment is provided.

LES ÉTAPES DE LA TRANSHUMANCE EN GRÈCE

HEALTH PREPARATION

Issues that may arise along the way

During transhumance, the following problems may occur :

- Lack of water during dry summers, increasing the risk of dehydration.
- Newly cultivated fields along traditional routes, which may be damaged if the flock crosses through them.
- New roads with increased vehicle traffic, making the passage of the flock more difficult and potentially dangerous

PREPARING THE JOURNEY

Usually the same route is followed every year. The route may change only if there is not enough grazing or water for the animals.A few days before the transhumance, the breeder checks the entire route by car to confirm that there is sufficient forage and water available at the usual points.
For accommodation, a tent is usually used, while in many cases the breeders sleep next to the fire, using blankets and clothing made from sheep wool to stay warm during the cold nights.







LES ÉTAPES DE LA TRANSHUMANCE EN GRÈCE

THE ANIMAL

Spring

In spring, before the movement to the mountains begins, all the animals are shorn at the winter quarters.About one week before the transhumance, bells are placed on the “stragoi,” the leading animals of the flock that guide the rest.

Autumn

In autumn, when the flock returns from the mountains to the winter quarters on foot, bells are again placed on the leading animals.The white sheep of the flock are also painted with red soil, which eventually gives their wool a pink color. This is a traditional practice that helps identify the flock.

Choice of breeds

Local Greek breeds are preferred because they are resilient in mountainous grazing areas, can cope with harsh weather conditions, make good use of natural forage, and are able to survive and perform well in demanding environments.

WELCOMING TRANSHUMANT HERDERS TO SUMMER PASTURES OR GRAZING AREAS

There is no specific ritual for welcoming the transhumant herders.However, informally, when they arrive in the village or the summer grazing areas, the herders usually gather in the evening at the village café. They talk, share news from the winter months, and reconnect with each other.

From June onwards, the first village festivals take place. During this period, the celebrations are mostly attended by the herders who live in the village for the summer, with traditional music, dancing, and communal festivities.

IIn autumn, when the herders have more free time (unlike spring, when the animals are being milked and daily work is intense), it is also common for one of them to slaughter an animal from his flock. In the evening, everyone gathers in the village square to eat together, as an informal form of celebration and companionship.





ISSUES RELATED TO CONFLICT MANAGEMENT

One of the main issues faced by transhumant herders in Greece involves conflicts with other users of the countryside and with changes in the environment.

Conflicts with hunters

In many areas, herders come into conflict with hunters.

- Hunting dogs may clash with livestock guardian dogs, leading to fights.
- When the flock passes through hunting areas, it may scare away the game, which causes tension with hunters.

This often results in arguments or complaints.

Conflicts with hikers and mountaineers

In recent years, more hikers and mountaineers visit mountain areas, and many of them are not familiar with flocks or guardian dogs.

- The barking of the guardian dogs often frightens hikers.
- Sometimes this leads to complaints or even official reports against the herder, even though the dogs are simply doing their job of protecting the flock.

Attacks from wild carnivores (wolves and bears)

The population of wolves and bears has increased inrecent years.

As a result :

- There are more attacks on flocks,
- leading to significant loss of animals,
- and a growing financial and emotional burden for the herders.

Problems along the transhumance route

Since the movement is done traditionally on foot, new obstacles appear that weren't present in the past :

- New cultivated fields may be created along the traditional paths. If the flock passes through them, the crops may be damaged, causing conflict with farmers.
- New roads with heavy traffic make the passage of the flock more difficult and dangerous.
- Areas where herders traditionally used to spend the night may no longer be safe, because cars now pass nearby at high speed, creating risks of injury for dogs, sheep, or even drivers.

STEPS FOR TRANSHUMANCE IN ITALY



ADMINISTRATIVE PREPARATION

Municipality + regional and veterinary coordination
Routes : historic tratturi + officially mapped routes
Information : landowners, farmers and local stakeholders involved + management of road safety

HEALTH PREPARATION

- Veterinary Service of the ASL (Local Health Authority) = main point of contact
- Mandatory declaration of movements + registration in the national database (BDN)
- Application for transfer to grazing areas must be submitted at least 15 days in advance
- Regulatory framework : EU Regulation 2016/429 (Animal Health Law) : disease prevention during animal movements

Animal Health Requirements (Before Departure)

Animals :

- identified + registered (passport / database)
- mandatory health tests (regulated diseases)



STEPS FOR TRANSHUMANCE IN ITALY

HEALTH PREPARATION

Certification / Traceability :

- mandatory movement declaration
- monitoring by veterinary authorities

Objective : prevent the spread of diseases between regions/herds

Monitoring During / After Transhumance

Checks may be carried out during movement
Health tests may sometimes be carried out after returning from grazing areas

Veterinary First-Aid Kit (Recommended – Field Practice)

- Although subject to few specific regulations, it is essential in practice :
- antiseptics / disinfectants
- wound care equipment
- antiparasitic treatment
- anti-inflammatory medicines (on prescription)
- basic equipment (bandages, thermometer, etc.)

PREPARING THE JOURNEY

Route assessment (route, water, forage)

- Use of official, mapped tratturi (pastoral route network recognised by the regions)
- Resource management :
  - access to public or designated grazing areas along the route
  - identified water sources (rural fountains, water troughs, watercourses)
- Advance planning with :
  - municipalities + regions + landowners
  - Objective : secure daily stages + natural feeding of the herd (pastoral areas and routes recognised by the Italian regions)

Movement Logistics

- Movement mainly :
  - on foot (traditional transhumance)
  - supervised by shepherds + dogs





STEPS FOR TRANSHUMANCE IN ITALY

PREPARING THE JOURNEY

- Pace :
  - daily stages adapted to the herd (rest + grazing)
- Possible logistical support :
  - support vehicles (equipment, supplies)
  - The practice is still active today in several regions (Abruzzo, Molise, Apulia)

Equipment : What and How ?

- Transported :
  - on pack animals (traditional) or
  - using modern support vehicles
- Essential equipment :
  - mobile fencing / nets
  - milking equipment (if necessary)
  - supplementary feed
  - bivouac equipment
- Current approach = a combination of tradition + motorised logistics

Means of Transport

- Main method : moving the herd on foot (tratturi)
- Additional options (depending on the context) :
  - trucks for certain sections (safety, long distances)
  - Subject to EU animal transport regulations (animal welfare)

Shepherd Accommodation

- Various solutions depending on the region :
  - temporary shelters (tents, bivouacs)
  - pastoral huts / existing shelters along the tratturi
- No traditional use of yurts or Berber tents :
  - instead, local lightweight structures or permanent rural accommodation
  - Pastoral heritage adapted to the Italian context (Apennines)





STEPS FOR TRANSHUMANCE IN ITALY

L'ANIMAL

Shearing

- Carried out before summer transhumance :
  - to prevent heat stress during the journey
  - to improve hygiene and reduce parasites
  - Common practice in transhumant sheep farming

Decoration

- A tradition still alive during certain transhumance movements :
- bells (campanacci) for the lead animals
- decorations (ribbons, collars) during events or festivals
- Role : identifying the herd & promoting cultural heritage (transhumance inscribed on UNESCO's Intangible Cultural Heritage list since 2019, with Italy involved in the original nomination and related projects)

Marking / Identification

- Mandatory and regulated (EU) :
  - ear tags (double identification)
  - registration in national databases (BDN)
  - Ensures : traceability, animal health monitoring (EU Regulation 2016/429 + national systems)

Choice of Breeds : Why ?

- Local breeds are preferred because they are well adapted to transhumance :
  - resistance to long-distance walking
  - adaptation to harsh environments (mountains / drought)
  - hardiness + ability to forage independently
- Examples : Pecora, Gentile di Puglia, Sopravissana
- Choice guided by :
  - pastoral tradition
  - ecological adaptation
  - product quality (milk, meat, wool)

Feeding and Adaptation

- Gradual adaptation phase before departure :
  - accustoming the animals to walking
  - dietary transition (lowlands ↠ mountains)





STEPS FOR TRANSHUMANCE IN ITALY

THE ANIMAL

During the journey :

- feeding mainly through grazing along the tratturi
- supplementary feed may be provided if necessary
  - Objective : prevent weight loss and digestive disorders (pastoral practices described in Mediterranean transhumance systems – FAO)

Group Management

- Frequent separation :
  - ewes / lambs
  - weak or sick animals
- Use of “lead” animals (often wearing a bell) to guide the herd
- Allows better management of movements and pace

Herd Protection

- Use of livestock guardian dogs (such as the Maremma-Abruzzese Sheepdog)
- Role :
  - protection against predators (wolves are present in the Apennines)
  - keeping the herd safe at night

Animal Welfare (EU Framework)

- Constant monitoring :
  - fatigue, lameness, hydration
- Compliance with the following principles :
  - access to water
  - rest periods
  - In accordance with European animal welfare requirements

Specific Risks to Anticipate

- Lameness caused by long-distance walking
- Heat stress (late departure, high temperatures)
- Predator attacks
- Disorientation / dispersal of the herd
  - Importance of close daily monitoring





STEPS FOR TRANSHUMANCE IN ITALY

ARRIVAL AND SETTLING OF TRANSHUMANT HERDS AT SUMMER PASTURES OR GRAZING AREAS

- Planned arrival at designated or rented grazing areas :
  - communal or private summer pastures
- Arrival often coordinated with :
  - municipalities, pastoral land managers or natural parks
- Settling in :
  - setting up enclosures
  - checking water + forage resources
  - Transition from a “movement” phase to a “settled grazing” phase (practices described in the pastoral systems of the Apennines – FAO / Italian regions)

Coexistence with Other Transhumant Herders

- Organisation based on :
  - allocation of grazing areas (usage rights, concessions)
  - grazing schedules
- Implicit and local rules :
  - respect for designated areas
  - coordination of movements to prevent overgrazing
  - Collective management is common in summer grazing areas

Rituals and Traditions

- Arrival is sometimes marked by :
  - local festivals or transhumance events
  - blessings of the herds (a tradition still practised in some regions)
- Cultural promotion :
  - transhumance recognised as UNESCO Intangible Cultural Heritage
  - Importance of the link between pastoralism and local identity

Organisation at the Grazing Site

- Implementation :
  - grazing rotations
  - daily monitoring
- Maintaining relationships with local stakeholders :
  - farmers, residents, authorities
  - Objective : sustainable coexistence + preservation of resources







STEPS FOR TRANSHUMANCE IN ITALY



ISSUES RELATED TO CONFLICT MANAGEMENT

- Land-Use Conflicts :
  - competition between livestock farmers (overgrazing of pastures)
  - tensions with farmers (damage to crops, fences)
- Conflicts with Tourism Activities :
  - difficult coexistence (hikers, mountain bikers, uncontrolled dogs)
- Presence of Predators (wolves) :
  - tensions between livestock farmers and wildlife protection policies
- Access to Water :
  - sharing limited resources during dry periods
  - Issues well documented in the pastoral areas of the Apennines

Examples of Conflict Management

- Official Allocation of Grazing Areas :
  - municipal concessions with specific rules (duration, stocking rate)
- Transhumance Schedules :
  - prevent overlap between herds
- Local Mediation :
  - role of municipalities, natural parks or pastoral associations
- Signage and Public Information :
  - signs indicating the presence of herds / livestock guardian dogs
  - Objective : organise coexistence rather than simply deal with conflicts
- Relevant Approaches : Italy (Partial Equivalent) :
  - maintenance and protection of tratturi (transhumance corridors)
  - legal recognition as heritage + routes for livestock movement
  - Common Approach : separate / organise different uses of the land

LES ETAPES DE LA TRANSHUMANCE AU MAROC



ADMINISTRATIVE PREPARATION

- Declaration to the Provincial Directorate of Agriculture (DPA) or the Regional Directorate of Agriculture (DRA)
- Declaration to the relevant local municipalities (Municipal Council or caïdat)
- Declaration to the National Agency for Water and Forests if the route crosses protected or forest areas.

ANIMAL HEALTH PREPARATION

Pre-Departure Animal Health Assessment

- ONSSA / Ministry of Agriculture (Provincial Directorate / Regional Directorate of Agriculture).
- Animals being moved must be accompanied by health certificates endorsed by the official veterinarian. Certain documents (a health certificate issued less than 6 months previously) are explicitly required for importation.

Basic Equipment

- Specific types of medicinal plants used for dressings, often prepared by women.
- Sterile dressings (compresses), gauze, bandage rolls, medical adhesive tape, elastic bandages.
- Disposable latex / nitrile gloves, masks, protective goggles.
- Scissors, tweezers, tick remover, rectal thermometer suitable for animals, headlamp.

PREPARING THE JOURNEY

Careful Route Planning

Long journeys are made by truck, particularly by nomadic herders moving from the Sahara to the Atlas regions.

Short journeys are made on foot, with stages planned in advance (forage, water sources, etc.), for example nomadic herders moving from Errachidia and Azilal towards the Tafingoult area in the High Souss.

Route Planning

Several types can be distinguished, the most important of which are as follows :

- Horizontal routes towards areas receiving rainfall.
- Vertical routes to find resources at higher altitudes during the summer (between the High Atlas and its southern foothills).
- Routes between argan-growing areas to make use of leafy forage resources.

Route Selection Criteria

Availability of water sources and forage, ease of passage, safe routes, and respect for Agdals (seasonal closures of grazing areas to allow grass regrowth and the regeneration of plant species), for example the Agdals of Oukaïmeden, Yagour and Aït Bouguemez.







LES ETAPES DE LA TRANSHUMANCE AU MAROC

PREPARING THE JOURNEY

Management of Forage and Water Resources

This is managed collectively, while respecting the areas allocated to each tribe.
Access to grazing areas is not subject to a formal request, but it sometimes leads to conflicts between nomadic herders and members of the tribes concerned.

Movement Logistics, Including Means of Transport

Transport is carried out using rented trucks, and the shepherds accompany their herds.

Equipment and Supplies (Berber Tent or Khayma)

Nomadic herders generally use tents woven from livestock wool and other simple materials.





THE ANIMAL

Goat Breeds

Atlas, Barcha, Ghazalia.

Sheep Breeds

D'man and Saghro. Noire de Siroua and Blanche de Montagne.

Traditional Breeds

Examples adapted to local environmental conditions.

Camel Breeds

Guerzni, Marmouri, Khouari, Jmal Jbel.







LES ETAPES DE LA TRANSHUMANCE AU MAROC

WELCOMING TRANSHUMANT HERDERS TO SUMMER PASTURES OR GRAZING AREAS

Déclaration et autorisation locale

- The right of passage to summer pastures is traditionally guaranteed between tribes, but settlement is only permitted for those with established rights.
- Shepherds arriving from distant areas, sometimes by truck, are allowed to use the pastures for a short period, based on principles of tolerance and solidarity (often a one-day stop to allow the herd to rest and graze).
- Coexistence Between Transhumant Groups
- Nomadic herders and local populations are strictly prohibited from grazing livestock in forested areas.

NB : In Morocco, summer grazing is governed by local agreements for the management of grazing areas (between neighbouring municipalities or tribes) and supported by pastoral development programmes (ORMVA, DPA, FAO or ANDZOA projects), together with awareness-raising initiatives on the protection of grazing areas and the sustainable management of resources.

ISSUES RELATED TO CONFLICT MANAGEMENT

Conflicts over grazing areas and transhumance result from increased competition for natural resources (water, grazing land, land), changes in lifestyles and the weakening of customary regulations. However, such cases remain rare and exceptional, and are more likely to occur during periods of drought and resource scarcity.

Types of Conflicts

- Conflicts over access to grazing areas
- Conflicts over water
- Intertribal / intercommunity conflicts
- Conflicts with local authorities
- Environmental conflicts

All these conflicts occurred frequently in the past. However, in recent decades, with the decline in the number of nomadic herders and the reduction in their mobility, they are no longer as acute.

Conflict Management and Resolution Methods

- Traditional (Customary) Approaches : defining periods of access to grazing areas (seasonal access).
- Administrative and Institutional Approaches : creation of developed and equipped grazing areas to accommodate nomadic herders and their herds, such as the Maader Tiznit grazing area.
- Security-Based Approach : intervention by local authorities to defuse the situation.
- Modern Participatory Mediation : intervention and advocacy by civil society.

LES ETAPES DE LA TRANSHUMANCE EN MONGOLIE



ADMINISTRATIVE PREPARATION

Legal Requirements

According to the "Law on Animal Health" of Mongolia, herder households must notify the local Soum Veterinary Unit and the Bagh Governor (local administrative leader) before migrating.

"Otor" (Long-distance Migration)

For inter-provincial or inter-soum migration (known as Otor), herders must obtain prior permission based on the "Inter-aimag Otor Agreement" or signa "Pasture Use Agreement" with thedestination administration.

XX Social Coordination: Herders often contact relatives or acquaintances in the destination area in advance to reach a verbal agreement on sharing pasture land.

Social Coordination

Herders often contact relatives or acquaintances in the destination area in advance to reach a verbal agreement on sharing pasture land.

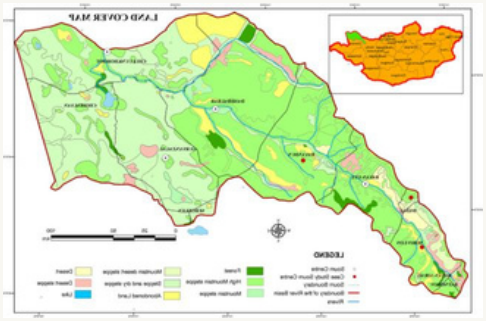
Route Planning

The route is selected based on traditional knowledge (pasture quality, water availability) combined with modern weather forecasts and pasture carrying capacity maps.

Notification

Permission is often required from the destination Soum's administration. Relatives or known herders in the destination area are contacted in advance to ensure acceptance.







LES ETAPES DE LA TRANSHUMANCE EN MONGOLIE

HEALTH PREPARATION

Veterinary Certificate

7-14 days before migration, herders must have their livestock inspected by a private veterinary unit to obtain a "Veterinary Certificate." This certifies the animals are free from infectious diseases (e.g., FMD, Anthrax, Sheep Pox) and is registered in the national digital system (MACE).

Prevention

Mandatory vaccinations (e.g., FMD vaccine) and anti-parasitic treatments (dipping/deworming) must be completed.

Mobile Vet Kit

Every herder carries a basic medical kit containing: Antibiotics (Penicillin/Streptomycin), anti-inflammatories, iodine/antiseptics for wounds, bandages, and ophthalmic ointments.

Risk Management

Measures are taken to prevent risks such as hoof injuries, exhaustion, poisonous plant ingestion, and predation by wolves (using night guards).







PREPARING THE JOURNEY

Scouting

The head of the household surveys the destination land a few days prior to check grass quality and water clarity.

Logistics & Transport

While traditional ox/camel carts were used historically, now 90% of transport is done via light trucks (Kia Bongo, Porter, ZiL-130). However, the livestock usually walks the distance (driven by herders on motorbikes or horses). For extremely long distances (500km+), livestock may be trucked.

Housing

The traditional Mongolian Ger (Yurt) is used. It is collapsible, easy to transport, and takes about 1-2 hours to set up. Herders also transport solar panels and satellite dishes for electricity and communication.

Resources

Water points (wells/rivers) determine the daily stopping points.

Water & Feed Management

Daily travel distances are calculated based on water points (wells/rivers). Sheep travel 15-20km/day, while cattle travel 20-30km/day

LES ETAPES DE LA TRANSHUMANCE EN MONGOLIE

PREPARING THE JOURNEY








THE ANIMAL

Breeds

Indigenous Mongolian breeds are used (Mongolian fat-tailed sheep, cashmere goats, Mongolian cattle/yaks, horses, Bactrian camels).

Adaptation

Imported breeds are rarely used for transhumance as they cannot graze under snow or withstand the temperature range (-40°C to +30°C).

Marking

Tamga : Hot iron branding used for large animals (horses, camels) as proof of ownership.
Im : Ear notching/cutting patterns used for small ruminants (sheep, goats).
Paint : Spray paint is used temporarily during migration to prevent herds from mixing with others.

Care

Shearing of wool and cashmere is performed before the spring/summer migration to prevent heat stress.





LES ETAPES DE LA TRANSHUMANCE EN MONGOLIE

WELCOMING TRANSHUMANT HERDERS TO SUMMER PASTURES OR GRAZING AREAS

Site Selection

The camp is set up on elevated, dry ground sheltered from the wind. Old campsites are cleaned before setting up the Ger.

Cohabitation

Herders follow the "Saakhalt" custom—camping at a respectful distance (0.5–2 km) from neighbors but sharing resources like wells and taking turns herding livestock.

Rituals

Tsatsal : Upon arrival, a spoonful of fresh milk or tea is sprinkled to the 4 cardinal directions to appease nature spirits and ask for safety.

Taboos : Polluting water sources or digging the earth without reason is strictly forbidden. Hospitality: Neighbors typically visit the newly arrived family with tea and food to welcome them.





ISSUES RELATED TO CONFLICT MANAGEMENT

Problems

Overgrazing : Overgrazing disputes, disputes over water wells, and unauthorized entry into another soum's reserve pasture during winter disasters (Dzud).

Concentration of too many families in one area leading to pasture degradation.

Water Access : Disputes over queuing at wells during droughts.

Winter Camp Encroachment : "Winter/Spring Camps" (Uvuljuu) are land possessions protected by the Land Law. Unauthorized use of another's winter camp is a major violation.

Resolution Mechanisms

Negotiation : Herders first attempt to resolve issues directly.

Mediation : The Bagh Governor or "Pasture User Groups" (PUGs) mediate unsettled disputes.

Legal Action : If unresolved, the Soum Governor issues an administrative order for eviction.

Example

Winter shelters (Uvuljuu) are strictly owned/registered. Encroaching on a winter camp is a serious offense and is regulated by the Land Law of Mongolia.

During a "Dzud" (severe winter disaster), herders from other provinces may migrate into local reserve pastures, causing resistance from local communities attempting to save their own grass.

ISSUES RELATED TO CONFLICT MANAGEMENT

Main Issues

Overgrazing : conflicts related to the overuse of pastures, access to wells, or unauthorised entry into another soum's reserve pastures, particularly during dzuds (extreme winters).
Population Pressure : excessive concentration of families in the same area, leading to pasture degradation.
Access to Water : tensions over the order of access to and use of wells during periods of drought.
Illegal Occupation : winter/spring camps (Uvuljuu), protected under land law, cannot be used without authorisation — any unauthorised occupation constitutes a serious violation.

Conflict Resolution Mechanisms

Direct Negotiation : livestock farmers first attempt to resolve conflicts among themselves.
Mediation : the bagh governor or Pasture User Groups (PUGs) intervene if necessary.
Legal Recourse : as a last resort, the soum governor may issue an administrative eviction order.

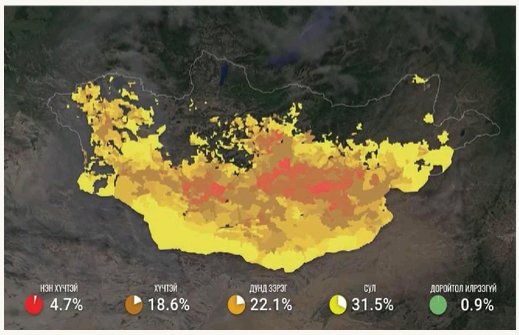
Specific Example

Winter shelters (Uvuljuu) are registered and legally protected. Their illegal occupation constitutes a serious offence. During dzud events, livestock farmers from other regions may migrate to these reserve areas, creating tensions with local communities seeking to preserve their own resources.









STEPS FOR TRANSHUMANCE IN ROMANIA



ADMINISTRATIVE PREPARATION

The sheep farmer holds a farm identification code issued by the veterinarian, registered at the regional level and recognized nationally (National Animal Identification and Registration System, hereinafter referred to as the NAIRS).

There is a permanent farm identification code, as well as temporary codes (summer farms, seasonal grazing areas, etc.).

Currently, pastures within the Territorial Administrative Units (TAUs) may be granted for a period of 7 to 10 years through two procedures: public auction or direct allocation.

The veterinarian issues the farmer with a health certificate authorizing the departure for transhumance.

The shepherd in charge of the flock ensures that all animals are identified with ear tags and carries the veterinary certificates issued by the farmers, thereby confirming their inclusion in the flock during transhumance.

Ewes that have not yet lambed, young sheep, and rams leave for the mountain pastures two to three weeks earlier than dairy ewes.

During the transhumance to the mountains, traditions include specific preparations, such as gathering the flock, often accompanied by a fair where traditional products are sold. These ceremonies mark the beginning of the pastoral season.

The maintenance of pastures and zoopastoral infrastructure is the responsibility of the livestock farmers who use them.



HEALTH PREPARATION

Compliance with national vaccination programmes is ensured by the veterinarian, who also carries out regular visits to flocks during transhumance.
Flocks must be equipped with a veterinary kit containing the medicines recommended by the veterinarian for emergency situations, as well as a first-aid kit, including dosage instructions and methods of administration.
This kit should include:

- analgesics and anti-inflammatory drugs to relieve pain and inflammation;
- broad-spectrum antibiotics to treat infections, according to the diseases commonly found in the region and within the flock;
- antiparasitic treatments against external parasites (ticks, fleas, lice) and internal parasites (intestinal worms, liver flukes), adapted to the season and the transhumance area;
- rehydration solutions for exhausted or dehydrated animals;
- hoof care sprays;
- hoof trimmers.

It is necessary to trim the horns of lambs and castrate rams to prevent injuries.
Salt is provided in the form of large blocks of natural salt, distributed every eight to ten days. Rather than being placed directly on the grass, the salt blocks are set on stone slabs known as “sanuni”.





STEPS FOR TRANSHUMANCE IN ROMANIA

PREPARING THE JOURNEY

During transhumance, shepherds rely on individual and collective mental representations of the route, marked by local place names known as “toponyms”.

The flock follows a specific and well-established route, using forest roads and ancestral paths.

Romanian legislation requires clear movement documentation and compliance with routes approved by the authorities.

Each year, the animals walk to the alpine grazing areas along well-known trails called “transhumance routes.” The transfer of large flocks over long distances may also be carried out using tractors, containers, tractor-trailers, or other suitable means of transport.

The equipment includes various items necessary for sheep care, food preparation, shelter, and personal protection.

Personal equipment and clothing : warm and durable clothing, sturdy boots, and bags.

Cooking equipment: cauldrons, wooden spoons, water containers, bags of cornmeal, cheese, bacon, wooden pots, wooden plates and spoons, knives, and axes.

Shelter and protection: tarpaulins, thick blankets, and livestock guardian dogs.

All participants in the transhumance carry their essential personal belongings themselves, using bags, improvised backpacks, or belt pouches.

Pastoral tools : shepherd’s staffs, whistles, and sheep shears.

The shepherd’s hut is a sturdy communal wooden structure, used temporarily during the summer by the same group of shepherds. It is located in sheltered areas protected from the wind, close to a water source and access paths, at the edge of a forest or in a clearing.

The huts are simple and rudimentary constructions made from local materials (wood, stone, and sometimes covered with straw, wooden shingles, or even modern tarpaulins). Inside, there are designated areas for milking, meal preparation (polenta, milk, and mutton stew), and sleeping, with beds made of wooden planks covered with thick blankets or animal skins.

The sheepfolds are open enclosures surrounded by wooden fences, where the sheep are kept at night to protect them from predators such as wolves and bears.







THE ANIMAL

The sheep breeds found in Romania are Țurcană, Țigăi, Stogoșe, and Merino.

Țurcană sheep are the breed most commonly preferred by shepherds for transhumance. They are characterized by their large size, which ensures good meat production, as well as by their resilience to harsh weather conditions, humidity, and climatic variations. Their fleece is long and thick, and may be white or black. The animals are carefully selected in order to preserve the most valuable specimens.

The marking of sheep, known as “buitul”, consists of applying distinctive ownership marks before the flocks are assembled for the mountain pastures. These marks enable the animals to be identified in autumn when the flocks are separated and returned to their respective owners. The colours used are red, black, and green, and the markings are applied to the withers, the middle of the back, or the rump.

The flocks are accompanied by three to five livestock guardian dogs, mainly of the Carpathian Shepherd Dog and Romanian Mioritic Shepherd Dog breeds, including the working shepherd dogs.

Guard and shepherd dogs are required to wear a “jujeu”, a cylindrical piece of hardwood measuring approximately 3 cm in diameter and 30 cm in length. It is attached by a chain to the middle of the dog’s collar and hangs below the front knees. The dog wears this device permanently.









STEPS FOR TRANSHUMANCE IN ROMANIA

WELCOMING TRANSHUMANT HERDERS TO SUMMER PASTURES OR GRAZING AREAS

Grazing of domestic animals on agricultural land is permitted from 6 December to 24 April.

The boundaries of the grazing areas are marked by “momăi” or “gomile”, traditional stone cairns.

Grazing in alpine sheepfolds follows established rules that are respected by all shepherds. Sheep are guided to clearly defined grazing areas and moved on a rotational basis to allow grassland regeneration.

The mountains are considered a common resource. Their vast expanse enables a shepherd to graze sheep simultaneously on a ridge and on neighbouring slopes. Shepherds know one another, have forged friendships through life in the mountains, and communicate by telephone, by voice, or through whistled calls. They return to the same grazing areas year after year.

Shepherds sleep outdoors, wrapped in their sheepskins, which serve as their shelter.

The bonds between shepherds are even stronger when they are related by family ties, and pastoral traditions are passed down from one generation to the next.

Certain landmarks are associated with personal memories or community legends, and sometimes with ritual gestures or simply with traditional stopping places along the transhumance route.













EXTRACT FROM THE INVENTORY SHEET FOR THE INSCRIPTION OF THE PRACTICE OF TRANSHUMANCE ON UNESCO'S REPRESENTATIVE LIST OF THE INTANGIBLE CULTURAL HERITAGE OF HUMANITY 2023

ANNEXES

- **EXTRACT FROM THE INVENTORY SHEET**

Nomination File No. 01964 for Inscription in 2023 on the Representative List of the Intangible Cultural Heritage of Humanity

https://ich.unesco.org/fr/RL/la-transhumance-deplacement-saisonnier-de-troupeaux-01964

1 - Provide a brief description of the element that will introduce it to readers who have never seen or experienced it before.

Transhumance, from the Latin “transumere” (“trans” meaning “to the other side/beyond” and “humus”, “the soil/the land”), is a form of pastoralism involving the seasonal movement of people and their livestock (sheep, cattle, goats, horses, donkeys, etc.) between different geographical and/or climatic regions along traditional pastoral paths (Andorra : “carrerades” ; Albania : “shtigje” ; France : “drailles” ; Greece : “strates”/“diava” ; Italy : “tratturi” ; Romania : “drumurile oilor” ; Spain : “cañadas”) or established routes.

Every year, in spring and autumn, livestock farmers organise the movement of their livestock, sometimes leading thousands of animals along these routes, accompanied by their dogs. The livestock farmer’s family sometimes takes part in the journey. In other cases, the owner hires a specialised team of herders or transhumance experts.

Combining tradition and innovation, transhumance incorporates modern tools : mechanised transport, ICT, veterinary assistance, etc.

Transhumance, an ancestral practice, shapes relationships between humans, animals and ecosystems, creates links between territories, contributes to the preservation and safeguarding of local breeds, improves soil fertility through manure, makes use of a wide variety of forage resources, and structures a transhumant pastoral community along “commons” consisting of public and private properties.

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ANNEXES

- **EXTRACT FROM THE INVENTORY SHEET**

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Transhumance is associated with shared knowledge, social practices and rituals relating to animal care and husbandry, dog training, the management of land, forest and water resources, and the prevention of natural hazards (fires, erosion, desertification, etc.).

Transhumance enhances botanical diversity and endemic wildlife in various ways. It promotes domestic animal biodiversity through the preservation of local/indigenous breeds (cattle, horses, sheep, goats, donkeys, dogs, pigs, etc.) that are emblematic of their territories, hardy, resilient, mobile and adapted to harsh local geographical and climatic conditions. With differences in altitude of up to 2,000 or 3,000 m and routes sometimes extending over hundreds of kilometres, two types of transhumance can be distinguished.

- Horizontal transhumance (called “trasterminancia” in Spanish or “transumanza pastorale” in Italian) : it is practised in lowland and/or plateau areas by livestock keepers and their livestock, who move according to the availability of water and forage resources, without necessarily changing altitude.

- Vertical transhumance : it is typical of mountainous regions (Pyrenees, Alpine arc, Carpathians, Spanish sierras, etc.), where animals are moved from valleys to high-altitude pastures, with two variants depending on the direction of seasonal migration.

- Direct/summer transhumance : this is the seasonal migration, in summer, of livestock farmers and herders who live in the plains or valleys to higher-altitude pastures.

- Reverse/winter transhumance : this is the seasonal migration, in winter, of livestock farmers and herders who live in the mountains to lower-altitude pastures.

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- **EXTRACT FROM THE INVENTORY SHEET**

These forms of migration have always been the result of an in-depth knowledge of the environment and its ecological balance, as well as a strong capacity for adaptation and resilience in the face of climatic and geographical challenges. Transhumance is the most efficient and sustainable livestock farming system in terms of the use of natural resources and land management. It has given rise to numerous specific forms of know-how that are emblematic of transhumance territories.

Over the centuries, an entire socio-economic system has developed around transhumance (food and wine traditions, local crafts, cultural activities, etc.).

Spring and autumn festivals (marking the beginning and/or end of transhumance) remain the most enduring expressions of the collective memory and identity of the communities.

Men and women, sometimes accompanied by their families. In all countries, families and communities have practised transhumance for many generations and identify with this tradition. Assisted by their dogs, all practitioners play a specific role in preparing, organising, managing and/or leading the movement of livestock.

The way in which every detail is organised and managed before, during and after transhumance remains deeply rooted in a strong ancestral tradition.

Difficult circumstances (long journeys on foot, lack of water and shelter, challenging geographical environments and climates, wild animals, etc.) have led transhumant herders to develop an in-depth knowledge of nature and a high degree of resilience : being able to interpret the landscape, prepare for changes in weather conditions and understand the natural environment are essential skills for the well-being of livestock farmers and their animals and are necessary to avoid dangerous situations. Although all transhumance practices share similarities, their great richness lies in the specific environments and local realities of each region and country.

2 - Who are the bearers and practitioners of the element ? Are there specific roles, including gender-related roles, or categories of people with particular responsibilities for the practice and transmission of the element ? If so, who are these people and what are their responsibilities ?

The bearers and practitioners of the element are transhumant herders – men and women –, sometimes accompanied by their families. In all countries, families and communities have practised transhumance for many generations and identify with this tradition. Assisted by their dogs, all practitioners play a specific role in preparing, organising, managing and/or leading the movement of livestock.

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Having been involved in transhumance since childhood, transhumant herders acquire unique experience and extensive knowledge of breeds (generally local) and of the natural environment around them. They take on specific roles according to their age and experience.

During transhumance, one of the herders takes on the role of leader (generally, but not always, the oldest male herder) and heads an entire hierarchy extending down to apprentice herders. Transhumant herders (known as “karvanjar” in Albania), who travel on foot or sometimes on horseback, supervise the movement of livestock accompanied by trained dogs (herding or guardian dogs used, in particular, for protection against predators) and mules carrying household items and food (for example, in Romania).

The dogs and herders work together, forming strong bonds based on mutual trust and respect. Within the herd, certain animals play a specific role : castrated male goats (“ghesemia” in Greece, “manso” in Spain, “flouca” in France, “përçor” in Albania) or experienced animals that know the route (the “Schellerin” – mother ewe – in the Alps, mules in Romania, “asini” in Italy) are trained to lead sheep, goats, cattle or even rams. The animals wear different types of bells (generally attached during a ceremony held before the start of transhumance), each producing a distinctive sound that varies according to the animals’ role, whether they are leaders or part of the rest of the herd.

Before departure for transhumance, an important social activity, often including a traditional celebration, is organised : the marking of the animals. Each livestock farmer assigns a specific colour and symbol to their animals. When transhumance involves milk-producing animals, arrangements are made to organise cheese production and preservation.

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- **EXTRACT FROM THE INVENTORY SHEET**

People living along transhumance routes or those who take part in them also play an important role (for example, by celebrating the passage of the herds, organising festivals/fairs and guided walks, etc.). Together with the practitioners, they share common values of solidarity, conviviality, mutual respect and the promotion of this ancestral practice.

3 - How are the knowledge and skills related to the element transmitted today ?

Knowledge and skills are primarily transmitted from one generation to the next within the family, regardless of gender. Transmission takes place “on the job”, gradually, season after season, through observation and imitation and by taking part each year in the different stages of transhumance alongside experienced herders.

“On-the-job” transmission enables practitioners to acquire essential knowledge and skills concerning livestock, herd management, animals’ needs, the care they require during difficult journeys and how to protect them from danger. This transmission also provides specific knowledge of routes, animal behaviour, the allocation of grazing areas and grassland management, as well as the safest and most effective ways of moving herds. It also enables the development of craft skills and know-how related to food, food and wine traditions (cheese production, for example), and human and animal health.

This peer-transmitted culture also encompasses social and cultural aspects, such as elements of place names and personal names, or vocabulary related to animal husbandry in local languages or dialects. Traditional celebrations (songs, stories and legends) marking the beginning or end of transhumance have developed over the centuries in all countries. The culture of transhumance has given rise to rules governing relationships between herders, livestock and territories. Social skills and collective forms of organisation have been brought together to manage common pastures, movements, employment and disagreements that may arise during long journeys. Over the years, a strong sense of solidarity and mutual respect has developed between transhumant communities and the populations of the territories through which they travel.

Given the lack of generational renewal in several countries, bearers provide non-formal training in the form of mentoring or thematic workshops organised by local communities, networks of herders and livestock farmers, associations and job fairs in order to counter this trend.

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- **EXTRACT FROM THE INVENTORY SHEET**

Furthermore, agricultural education institutions, universities and technical or research institutes, depending on the territory, contribute to documenting the skills specific to transhumance, promoting formal transmission and demonstrating the scientific importance of transhumance for the environment, climate change mitigation and socio-economic development. Training programmes enable individuals with no previous pastoral experience to acquire practical and theoretical knowledge. Shepherds may be required to work in different parts of their country and must therefore be trained so that they can work in different regions.

Festivals, celebrations, fairs and activities organised by pastoral communities and their partners represent an important means of transmission, as these opportunities for exchange, sharing and conviviality allow livestock farmers to compare their practices and experiences (in dog training, meat or dairy production, animal husbandry, etc.) with the aim of highlighting all aspects of transhumance, strengthening local identities and promoting everything related to this culture.

Traditional, ecological and meteorological knowledge is rooted in local culture and the environment ; it is dynamic, constantly adjusting and adapting to new circumstances, and evolving through a combination of long-term ecological understanding and learning from crises and mistakes. This increases the capacity of socio-ecological systems to cope with crises and maintain resource flows under changing and uncertain conditions.

4 - What social functions and cultural meanings does the element currently have for its community ?

Strengthening Cultural Identity

Transhumance shapes the identity of its practitioners and bearers, establishing a strong connection with their ancestors and the universe. It inspires a way of life conducive to spiritual pursuits. Transhumant herders often explain that they are attached to this practice because it makes them feel free and independent. This freedom (although relative), a cornerstone of transhumance, is sought, valued and asserted, as it almost outweighs the many constraints imposed by this way of life.

For practitioners, transhumance is much more than a profession : it is a way of life governed by the seasons.

Strengthening Ties Between Families, Communities and Territories

Generation after generation, family, social and cultural ties have developed between communities, as reflected in family names, place names and personal names, oral expressions, stories, social practices, celebrations, rituals and shared symbolism.

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- **EXTRACT FROM THE INVENTORY SHEET**

These ties extend beyond the community, bringing together land managers, administrators and other stakeholders from the rural world who form a genuine transhumant pastoral community.

Transnational ties and treaties have existed between countries for several centuries. Examples include the “Facerias” of transhumant communities between France, Spain and Andorra in the Pyrenees, and the “Weiderechtsvertrag” (1415 treaty on the use of pastures) in the Alps, between the Ötztal (Austria) and Val Senales (Italy).

Cooperation for Social Inclusion

Transhumance has largely supported peripheral economies in the rural contexts of villages and hinterland areas facing significant depopulation, by facilitating contact and trade between remote communities.

The element not only contributes to the long-term safeguarding of practitioners’ traditional knowledge and skills, but also ensures their ecological, social and economic sustainability through its organisational model and enables the development of human institutions and additional agricultural activities, thereby creating sustainable and resilient networks.

Development of the Transhumant Community and Profession

Regional, national and international relationships, meetings, and cultural and professional exchanges between members of the community contribute to establishing and strengthening cultural unity across borders.

The community protects collective interests, enhances the herding profession (and the products associated with it), contributes to understanding and shaping landscapes, and to safeguarding and transmitting this element of ICH.

Cultural festivities related to transhumance help raise public awareness of its importance and foster a sense of pride among livestock farmers and everyone involved in transhumance – a well-deserved pride in view of all the important environmental and socio-economic services they provide.

Sustainable and Locally-Based Agricultural Production

Associated with a territory and its history, products made using very few agricultural inputs and no synthetic products (delicious in the case of meat and cheese, efficient in the case of wool, leather and other fibres) have sufficient qualities to meet the expectations of today’s consumers : they are traceable and respectful of producers, animals, the environment and biodiversity.

ANNEXES

- **EXTRACT FROM THE INVENTORY SHEET**

Through its know-how combining tradition and innovation, the community promotes foods made from the milk or meat of transhumant livestock, strongly influenced by diverse pastoral vegetation and flora according to the seasons and terrain, thereby contributing to the promotion of local qualities.

It also draws on its local knowledge of aromatic, medicinal and edible plants for the processing, preservation and promotion of its products. The resulting products encourage the establishment and development of local populations and value chains, thereby helping to counter rural depopulation.

Is there any aspect of the element that is not compatible with existing international human rights instruments or with the requirement of mutual respect among communities, groups and individuals, or that is not compatible with sustainable development ?

Transhumance is compatible with international human rights instruments.
No aspect of transhumance appears to conflict with fundamental human rights or the principles of peaceful coexistence.

By preserving the balanced relationship between human practices and the natural environment, transhumance meets requirements of all kinds : food-related, social, professional, environmental, cultural, etc. It is based on traditional organisational rules founded on freedom of participation, cooperation regardless of gender, solidarity and respect for human dignity.

Transhumance maintains a connection between communities, people, cultures and religions, transcending conflicts and differences.

Transhumance has had a lasting influence on the territory and culture of Europe, shaping the development of historic buildings along the routes and the growth of monuments and places of worship, and creating an extensive network connecting plains and mountains.

Activities related to transhumance have also given rise to cross-border identities and cooperation in which national contexts are considered secondary, as in the case of herders in the Pyrenees, the Alps, the Carpathians or other border regions. The regulation of pastures and the allocation of grazing areas are based on mutual understanding between herders, livestock owners and local authorities.

ANNEXES

- **EXTRACT FROM THE INVENTORY SHEET**

As international exchanges have become increasingly easy, the transhumant community has acquired a more international character. Many shepherds cross the borders of their country to practise their profession in neighbouring territories, and sometimes even in very distant countries. Beyond the traditional circle of its practitioners, transhumance attracts people from all backgrounds who aspire to become herders and live in harmony with nature and animals.

Transhumant livestock farming offers many advantages for the future. Based for thousands of years on the natural cycles of local animal and plant species, it meets society's expectations as recognised by public policies. In due recognition of this pastoral heritage, a large proportion of the areas associated with it are now classified as "protected areas" or "remarkable natural areas", including national and regional parks, geoparks, nature reserves and Natura 2000 sites (protected areas of the European Union).

Concerned with preserving the pastoral potential of the areas they use, transhumant livestock farmers and herders adopt practices based on extensive grazing, as well as facilities and construction methods using local materials that are more environmentally friendly, since they have contributed significantly to shaping and opening up the landscape.

From wooded areas, with steppe or wetland environments in coastal areas, to summer pastures in high valleys, or heathlands and scrublands on mid-altitude plains, transhumance promotes plant biodiversity and its adaptation to climate change. The movement of livestock creates and maintains ecological corridors that enable seed dispersal and connect essential habitats, thereby preventing isolation and fragmentation, which are among the most serious threats to biodiversity-rich areas.

Transhumance provides direct benefits in terms of regulating the water cycle, as the construction of reservoirs and the movement of animals help to reduce pressure on resources. Indeed, during transhumance, water is consumed where it is stored and available.

At the international level, the inscription will contribute to broadening the understanding of ICH in a rural context and the scope of cultural expressions related to sustainability.

It will encourage States Parties and bearers of similar practices to safeguard their pastoral traditions through the instruments of the 2003 Convention, identifying them as a sustainable means of addressing the challenges posed by urbanisation and globalisation.

ANNEXES

- **EXTRACT FROM THE INVENTORY SHEET**

Transhumance is practised in many States Parties. Inscription will strengthen regional and international cooperation, given the important role of ICH in sustainable development. From its outset, the nomination process has been an open process exploring the common roots of transhumance across all the territories concerned. The process itself has fostered dialogue between the different communities on agropastoral life and issues relating to landscapes, crafts, food, the traditional allocation of pastures, history and culture.

The need to exchange and coordinate efforts to safeguard and promote the element was the starting point for a transnational partnership on transhumance, supported by the FAO Pastoralist Knowledge Hub (https://www.fao.org/pastoralist-knowledge-hub/). This partnership will be extended to communities in other States Parties, which will stimulate and ensure the long-term visibility of the element and of ICH in general, while encouraging safeguarding and promotion initiatives elsewhere. Inscription will demonstrate that ICH can foster effective teamwork, strong relationships and organisational skills among members of the international community, regardless of their social and cultural differences.

The expansion to other countries has already enabled exchanges between several pastoral communities. In addition, the various safeguarding projects have provided a rich source of plans for sustainable development aimed at improving the visibility and sustainability of the element. This connection can lead to an increase in cooperation initiatives and the creation of professional networks.

PLANT FACT SHEETS

FRANCE

GREECE

ITALY

MOROCCO

MONGOLIA

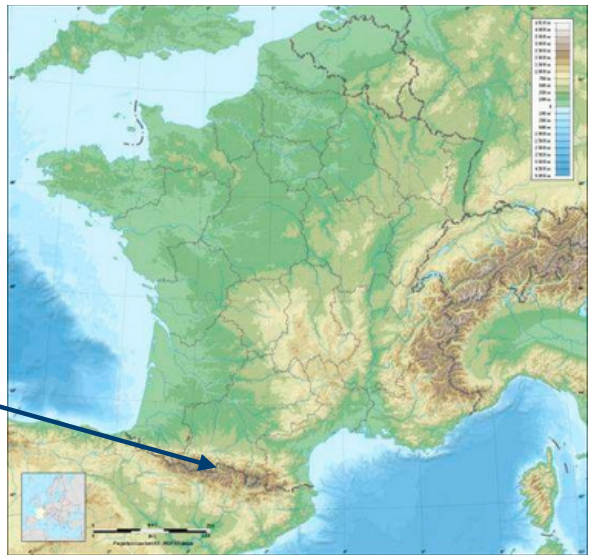
ROMANIA

ECO-TransH

France

1. Carte





2. Les impacts du changement climatique sur la ressource fourragère et en eau

- ↘ Disponibilité en eau
- ↗ Risques de sécheresse, vagues de chaleur
- ↗ Risque d'érosion des sols
- ↘ Durée du cycle cultural, rendements
- ↘ Zones favorables aux cultures

+ ’Augmentation globale de l’ordre de 5 à 20% de la production fourragère d’ici à 2100.
’ Modification de la composition botanique : + de légumineuses

− ’Diminution du rendement estival.
’Dégradation des états hydriques et azotés des prairies

Solutions : ’Adaptation de la conduite des prairies ’ Révision des calendriers de mise à l’herbe et de la gestion de la reproduction du troupeau

3 -Les animaux emblématiques sensibles au changement climatique



Le bousier



L’euprocte des Pyrénées



Le desman des Pyrénées

3. 1- Les animaux transhumants des Pyrénées



Race ovine tarasconnaise des Pyrénées



Race bovine gasconne des Pyrénées



Le Patou des Pyrénées

4 - La flore emblématique sensible au changement climatique



Drosera à feuille ronde : plante carnivore
Drosera rotundifolia



Sabot de vénus
Orchidée endémique des Pyrénées centrales



Lys des Pyrénées
Lilium Pyrenaicum

4.1 Les plantes pâturées par les animaux transhumants



Trifolium Alpinum
Fabacéae



Lotus corniculatusalpinus
Fabacéae



Festuca eskia
Poacéae



Festuca rubra
Poacéae



Agrostis alpina
Poaceae



Deschampsiacespitosa
Poaceae

ECO-TransH France

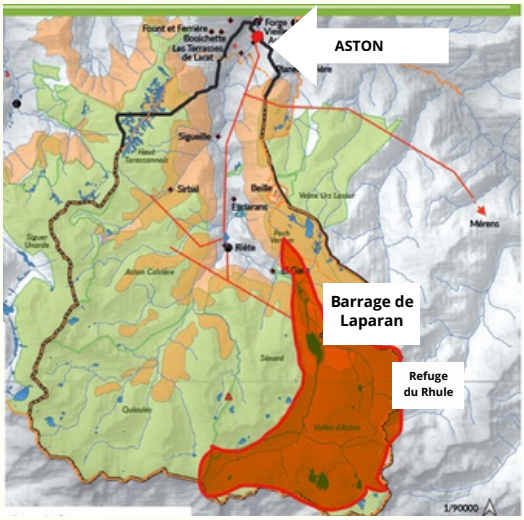
Vallée d'Aston



Généralités

- Département Ariège (09), Occitanie,
- Point culminant : 2912m,
- Activité métallurgique dès le Moyen-Âge,
- Développement de l'hydroélectricité depuis les années 1940,
- Station de ski.





Estive de Laparan

- 160 vaches
- 35 juments
- 200 brebis
- 10 éleveurs
- 1 vacher
- 10 juin - 20 octobre
- 1 refuge (touristes)
- 3 cabanes de vachers



Gasconnes des Pyrénées



Mérens



Brebis tarasconnaises



Refuge du Rhule



Cabane de berger

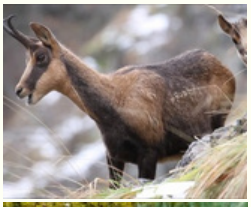


Parc de contention

ECO-TransH France

Environnement naturel

- Lacs, tourbières et zones humides d'origine glaciaire,
- Flore rare : Subulaire aquatique, Isoète, Linaigrette,
- Faune endémique : isards, loutres, gypaètes, grands tétras, lagopèdes,
- Espèces menacées : papillon Nacré de la bistorte et lézard d'Aurelio.






Principales plantes fourragères



Fétuque rouge
Festuca rubra
Faciès de végétation : pelouses, fougeraies, landes.



Trèfle blanc
Trifolium repens
Faciès de végétation : pelouses.



Trèfle alpin
Trifolium alpinum
Faciès de végétation : pelouses.



Agrostide vulgaire
Agrostis castellana
Faciès de végétation : pelouses, landes et fougeraies.



Lotier corniculé
Lotus corniculatus
Faciès de végétation : pelouses.



Lotier des Alpes
Lotus alpinus
Faciès de végétation : pelouses.



Flouve odorante
Anthoxanthum odoratum
Faciès de végétation : pelouses, fougeraies et landes.



Avoine sillonnée
Helictochloa marginata Faciès de végétation : fougeraies et landes.



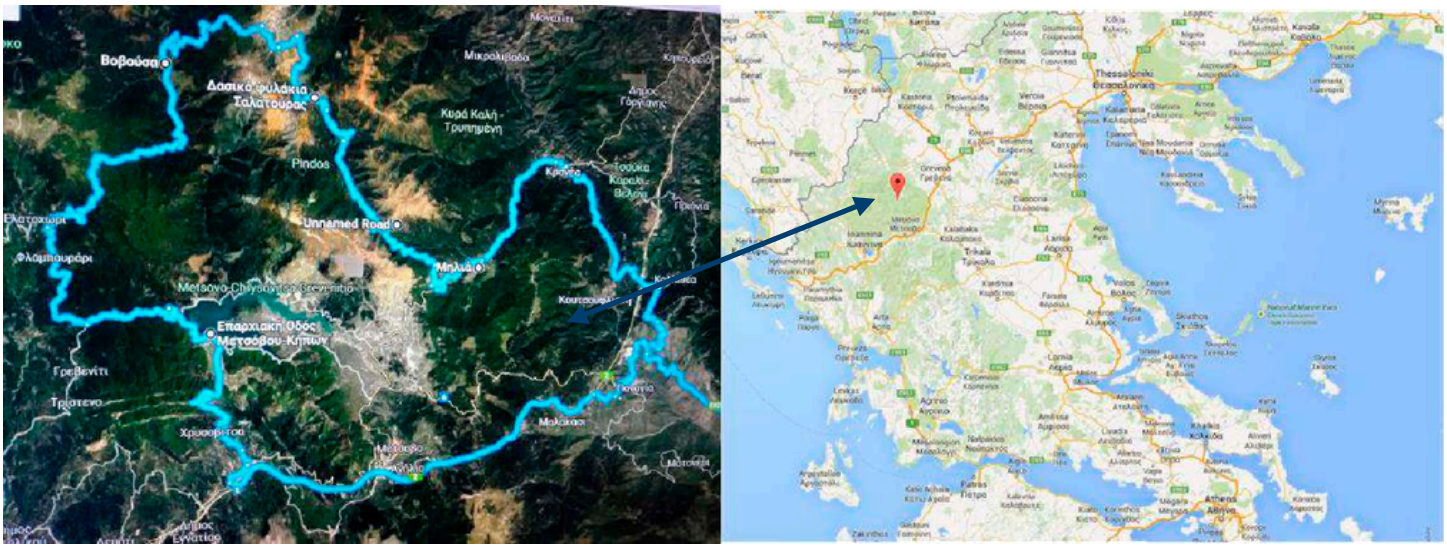
Avoine élevée
Arrhenatherum elatius
Faciès de végétation : pelouses et landes.

Sources : PNR Ariège 09, Fédération pastorale 09, vacher du Groupement Pastoral de l'estive de Laparan.

ECO-TransH

Greece

1. Carte / Map



Greece is a Southern European country particularly vulnerable to wildfires due to its climate, topography, and vegetation. The combination of hot, dry climates, extensive forested areas, and strong winds creates ideal conditions for wildfires to spread rapidly, endangering communities, destroying homes and infrastructure, and causing substantial ecological damage. This is particularly true in the context of the incumbent climate crisis, expected to get worse in the coming years. At the same time, climate change-related disasters such as extreme floods are accelerating biodiversity loss, in both fauna and flora of the country, highlighting the urgent need for resilient livestock systems. The agricultural sectors, suffer profound losses as farmland, crops, and livestock are engulfed by flames or heavy amount of water, disrupting supply chains and livelihoods. Despite efforts to improve prevention measures, ongoing challenges persist and escalate, necessitating continued investment and coordination to mitigate the risk and protect its vulnerable regions.

3. Les animaux emblématiques sensibles au changem ent climatique



Tengmalm's Owl - *Aegolius funereus*



Hermann's tortoise -Testudo hermanni



Lynx -Lynx lynx

3 .1Les animaux transhu mants



Greek Shepherd or Greek Sheepdog



Kalarritiko sheep



The Vrachikeratiki cattle

4. La flore emblématique sensible au changement climatique



Endemic oro-Mediterranean heaths with gorse

Eastern sub-Mediterranean dry grasslands (Scorzoneratalia villosae)



High oro-Mediterranean pine forests

4.1 Plants consumed by animals in transhumance.



Festuca arundinacea
Poaceae



Lolium perenne
Poaceae



Lotuscorniculatus
Fabaceea



Medicago sa va
Fabaceae



Dactylis glomerata
Poaceae

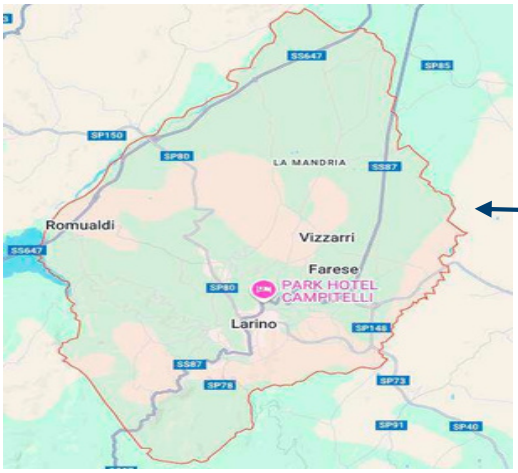


Trifolium repens
FabaceaTrifolium repens

ECO-TransH

Italy

1. Map





2. The impacts of climate change on fodder and water resources

"Climate change is having a significantimpact on forage and water resources worldwide. Some of themost relevant effects include: Dr ought and water scarcity: climate change is altering precipitati on patterns and increasing water evaporation due to higher temperatures, leading to more frequent and intense droughts. This affects the availability of water for irrigating forage crops and feeding animals. Changes in forage crop productivity: variations in temperature and precipitation can impact the growth and productivity of forage crops, such as alfalfa, corn, and sorghum. This can lead to a reduction in the availability of forage for animals. Increased competition for water resources: with the growing global population and increasing demand for food and energy, competition for water resources is increasing. This can lead to conflicts between different water users, such as farmers, industries, and urban communities. Impacts on animal health: climate change can impact animal health by increasing heat stress, the spread of diseases and parasites, and reducing forage quality. Adaptation and resilience: to mitigate the impacts of climate change on forage and water resources, farmers and livestock producers must adopt adaptation strategies and increase the resilience of their production systems. This can include using drought-resistant crops, implemen ting water conservation practices, and adopting more efficient grazing management systems.

In summary, climate change is having a significant impact on forage and water re

sources, and farmers, livestock producers, and policymakers must work together to develop adaptation and mitigation strategies to ensure food security and the sustainability of animal agriculture."

3 . Iconic animals sensitive to climate chan ge



oak sphinx



oak beetle



kite

3.1 .Transhumant anim als



cows



horses



sheeps

4. Iconic flora sensitive to climate change



ophrys erbacea



blackberry



anemone

4.1P lants consumed by animals in transhumance.



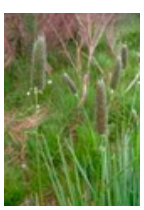
Lotus corniculatus
Fabaceae



Bromus hordeaceus
Poaceae



Festuca arundinacea
Po ace ae



Alopecurus pratensis
Poaceae



Lolium perene
Po ace ae

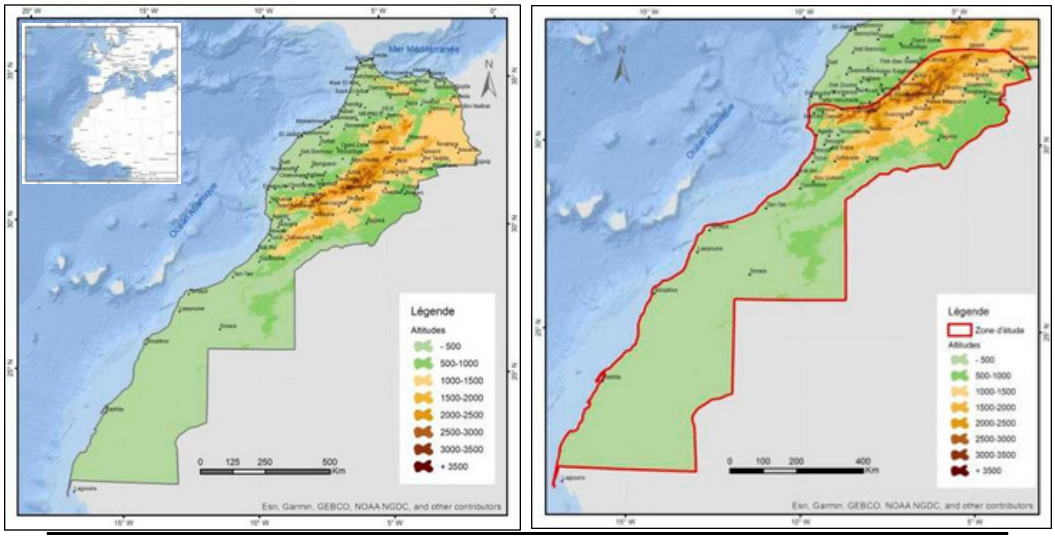


Poapra tensis
Poaceae

ECO-TransH

Maroc

1.Carte / Map



2. Les impacts du changement climatique sur la ressource fourragère et en eau

Le Maroc est l'un des pays méditerranéens les plus sensibles aux changements climatiques. Il est donc bien soumis aux risques de l'évolution climatiques. Les études ont montré que ces changements pourraient provoquer un dérèglement des régimes naturels saisonniers des précipitations et donc des cours d'eau. La pénurie d'eau au Maroc est certainement la conséquence du changement climatique à cause de la hausse des températures et des précipitations irrégulières. Nous savons que sous l'impact du changement climatique, il y aura moins d'eau disponible pour les usages. Cela signifie également une pression accrue notamment sur les systèmes pastoraux. La grave sécheresse que nous avons connue récemment (six années de sécheresse) est un avertissement de ce qui pourrait se produire à l'avenir. Elle menace la disponibilité de l'eau et la sécurité alimentaire des éleveurs, par la diminution des rendements fourragers des principaux pâturages. Donc, face à la réduction des parcours et avec la récurrence des années de sécheresse, les éleveurs adoptent des stratégies de gestion des troupeaux adaptées et très fines,surtout que la couverture des besoins des cheptels est dépendante à 90 % des parcours.

3. Les animaux emblématiques sensibles au changement climatique



Le Lézard fouette qu eue



L'Ecureuil d e Barbarie



La Perdrix gambra

3.1Les animaux transhumants



Les Dromadaires



Les Caprins



La D'man

4 .La flore emblématique sensible au changement climatique



L'Acacia



L'Arganier



Le Jujubier sauvage

4.1 Les plantes pâturées par les animaux transhumants



Acacic spp.
Fabaceae



Argania spinosa
Sapotaceae



Ziziphus lotus
Rhamnaceae



Aris da pungens
Poaceae



Laumnea arborescens
Asteraceae



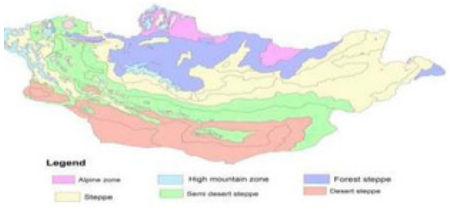
Reseda spp.
Resedaceae

ECO-TransH

Mongolia

Mongolian grassland

Introduction: The grassland can be divided into five natural zones (high mountain area, forest steppe, steppe, desert-steppe and desert) with markedly different terrain, climate, flora and fauna. The country's flora includes 4000 plant species, including over 600 forage species of which 200 are considered to be highly palatable to livestock.



Mongolia divided into five major agro-ecological zones.



The rangeland area classified about 210 vegetation types.

Grasslands in Mongolia make up approximately 82% of the land area and are the backbone of the rural economy. They are currently home to 57.6 million head of livestock

Some species of forage plants that are highly palatable to livestock









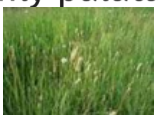




Needlegrass Poaceae Barnh. Stipa sibirica Lam. Flowering period: VI-VII EC**: Steppe, forest steppe EI***: Forage plant



False wheatgrass Poaceae Barnh. Leymus chinensis Trin. Flowering period: VI-VII EC: Steppe, meadow EI: Forage plant



Barley Poaceae Barnh. Hordeum brevisubulatum Trin. Flowering period: VI-VII EC: Meadow, riparian EI: Forage plant



Prairie wormwood Asteraceae. Dumort. Artemisia frigida Wild. Flowering period: VII EC: Steppe EI: Forage plant



Thistle Asteraceae Dumort. Echinops latifolius Tausch Barnh. Flowering period: VII-VIII EC: Meadow, riparian EI: Forage, medicine plant



Smooth brome Poaceae Barnh. Bromus invermis Leyss. Flowering period: VI-VII EC: Meadow, riparian EI:Forage plant



Needleleaf sedge Cyperaceae Juss. Carex duriuscula C.A.Mey. Flowering period: V-VI EC: Meadow, riparian Forage plant



Broadleaf chives Alliaceae. Allium senescens Pall. Flowering period: VII-VIII EC: Steppe, sandy plateau, EI: Forage plants



Great burnet Rosaceae Juss. Sanguisorba officinalis L. Flowering period: VI-VII EC: Meadow, riparian Forage plants



Alfa-alfa Fabaceae Lindl. Medicago falcata L (cont). Flowering period: VII-VIII EC: Meadow, riparian Forage plants



Fescue bunch Poaceae Barnh. Festuca lenensis Drobow. Flowering period: VI-VII EC: Mountian steppe EI:Forage plant



Needlegrass Poaceae Barnh. Stipa Klemenzii Roshev Flowering period: VI-VII EC: Dry steppe EI:Forage plant



Sedge Cyperaceae Juss. Carex Korshinskyi Kom. Flowering period: VI-VII EC: Meadow, riparian EI:Forage plant



Toadflax Scrophulariaceae Juss. Lunaria buriatica Turcz. Flowering period: VII-VIII EC: Meadow, riparian EI:Forage , medicine plant



Aster Asteraceae Dumort. Heteropappus hispidus (Thunbg) Less. Flowering period: VII-VIII EC: Steppe EI:Forage plant



Small bunchgrass Poaceae Barnh. Cleistogenes soongorica (Rochev) Ohwi Flowering period: V-VI EC: semi arid steppe EI:Forage plant



Horse tall Poaceae Barnh. Koeleria macrantha (Ldb). Schult Flowering period: V-VI EC: Mountain meadow, steppe EI:Forage plant



Little leaf peashrub Fabaceae Lindl. Caragana microphylla (Pall) Lam. Flowering period: VII EC: Steppe plant EI:Forage



Sibirian pasqueflower Ranunculaceae Juss. Pulsatilla turczaninovii Kryl.et Serg. Flowering period: V EC: Mountain steppe, meadow EI: Forage, medicine plant



Onion Alliaceae Barnh. Allium polyrrhizum Turz. Flowering period: VI-VII EC: Meadow, riparian EI:Forage plant



Feather needlegrass Poaceae Barnh. Stipa gobica Roshev. Flowering period: VII-VIII EC: Semidesert



Chee grass Poaceae Barnh. Achnatherum splendens (Trin.) Nevski Flowering period: VII-VIII EC: Sandy plateau, marsh, riparian EI:Forage, medicine plant



Calligonum Polyganaceae Lindl. Calligonum junceum (Fisch et Mey). Flowering period: VIII EC: Desert area



Short leaf anabasis Amaranthaceae Juss. Anabasis brevifolia Ca Mey. Flowering period: VII EC: Desert area EI: Forage plant



Onion Alliaceae. Allium mongolica. Flowering period: VII-VIII EC: Desert area EI: Forage plant

ECO-TransH

Roumanie

1. Carte / M ap





2. Les impacts du changement climatique sur la re ssource fourragère et en eau

La Roumanie subit l'effet combiné d'une forte augmentation des températures et d'une diminution des précipitations dans des zones qui connaissent déjà un déficit hydrique et où il existe une dépendance à l'irrigation.

À court terme, les futurs changements climatiques pourraient avoir des effets positifs sur le secteur en raison d'une saison de croissance plus longue et de conditions de croissance plus favorables dans certaines régions.

À long terme, les pénuries d'eau, les vagues de chaleur et les fortes précipitations contribueront à l'érosion des sols et d'autres conditions météorologiques et climatiques extrêmes entraîneront probablement une baisse de la production agricole.

Le stress hydrique affecte aussi bien les plantes que les animaux, les changements du régime hydrique ont restructuré le biotope de l'écosystème de montagne

La connectivité longitudinale des eaux courantes a un rôle particulièrement important en matière de reproduction, des espèces comme Cottus gobio, qui n'est pas une espèce migratrice, ont besoin d'un mouvement longitudinal important pour frayer.

3.Les animaux emblématiques sensibles au changement climatique



Cottus globio



Lynx lynx charpathicus



Rupicapra rupicapra

3.1 Les animaux transhuman ts



Race Ciobănesc Carpatin



Race Ţurcană



Race Aberdeen Angus

4.La flore emblématique sensible au changement climatique



Tozzia Carpathica



Campanula serrata



Centaurea phrygia var. ratezatensis



Astragalusroe meri

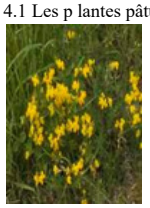


Astragalus excapus var. Tran ssilvanicus



Pedicularis baumgartenii

4.1 Les p lantes pâturées par les animaux transhumants



Lotus corniculatus Fabacea e



Trifolium alpinum Fabaceae



Trifolium campestre Fabaceae



Festuca rubra Poaceae



Poa anuua Poaceae



Agros s capilaris Poaceae

SOME USEFUL LINKS

ANNEXES

• USEFUL LINKS

Inventory Sheet
https://ich.unesco.org/fr/RL/la-transhumance-deplacement-saisonnier-de-troupeaux-01964

House of Transhumance
https://www.transhumance.org/

Erasmus+ PastorEA Project
https://fermewikisagro.fr/PastorEA/?PagePrincipale

Collective of Local Mountain Breeds (CORAM)
https://www.races-montagnes.com/

Transhumance – UNESCO Intangible Cultural Heritage (ICH) of Humanity
https://transhumance-patrimoine.fr/

Transhumance Routes
https://www.ttrr.eu/fr/
https://www.coe.int/fr/web/cultural-routes/home
https://transhumances.eu/

To explore the subject in greater depth and consult further definitions and case studies on pastoralism, visit the Transfarm project website : transfarm-erasmus.eu

Find all our educational and communication tools, photos and videos, as well as an illustrated version of this handbook, on the ECO-TransH website. https://ecotransh.com/fr_fr/







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