A thematic network on High Value Farming
Learning, INnovation & Knowledge

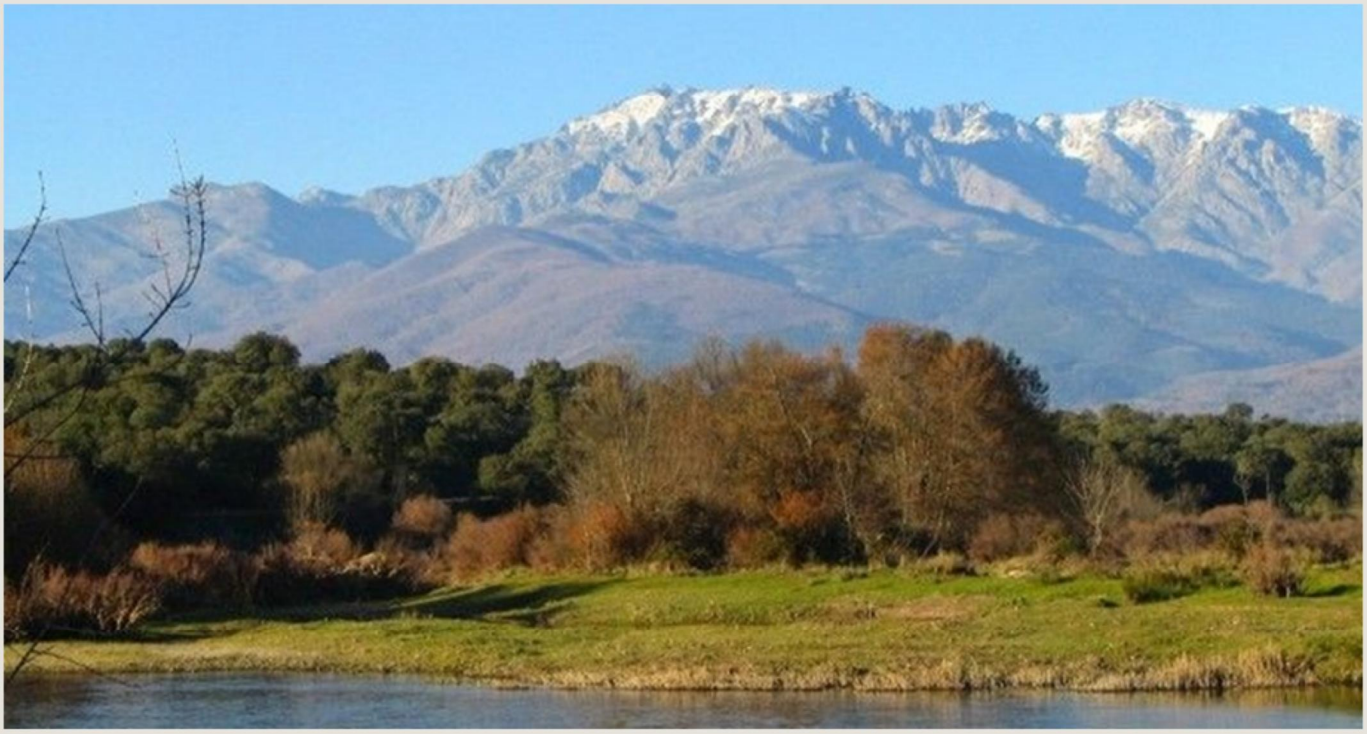
LEARNING AREA « LA VERA »
(Extremadura - Spain)

A BASELINE ASSESSMENT

Authors:Pedro M. Herrera, Julio Majadas, Guy Beaufoy, Remedios Carrasco and Javier García
Date: July 2017

This project has received funding from the European Union Horizon 2020 research and innovations program under Grant Agreement No. 696391

A portrait of La Vera



La Vera is a district situated on the south side of the Gredos mountains, a range of peaks of over 2,000m in altitude that are part of the Central System of mountains in the Iberian Peninsula

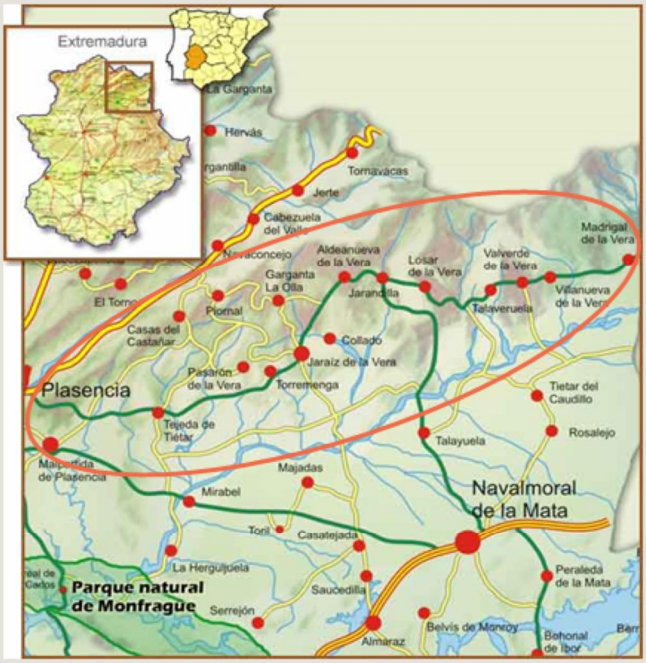
A portrait of La Vera

La Vera is a very special district, combining classic mountainous beauty with a favourable orientation and benign climate, factors which have favoured human occupation since prehistory.

The southern edge of the district is the floodplain of the Tiétar river, which today is dominated by intensive cultivation of tobacco and red peppers for pimentón (paprika). Until the 16th century, the valley was covered with woodlands of Pyrenean oak, holm oak and cork oak, with an extensive pine forest occupying the sandy soils of the river banks. These flatlands, at 300-350m altitude, were an unhealthy area with diseases such as malaria; consequently, the main human settlements were at mid-altitudes, around 400-600m, in the Gredos foothills. This is where the main farming took place, as the climate is also slightly more gentle and the plentiful rainfall and numerous small rivers coming down from the mountains allow for very diverse cropping and livestock systems.

Today La Vera above the irrigated river valley is dominated by a landscape of treeless peaks rising to over 2,000 metres to the north, descending in steep slopes with large masses of Pyrenean oak woodlands interspersed with grass and scrub pastures, and terraces with tree crops such as olives, figs and cherries in the foothills.

A mountain district in the north of Extremadura (Spain)



La Vera is in the centre-west of Spain, in the north-east of Cáceres province, in the Autonomous Region of Extremadura. The regional government is responsible for farming and environmental policies, within the State and EU frameworks.

Location

La Vera was originally called La Vera de Plasencia, the name of the cathedral city at the western end of the district, with approximately 40,000 inhabitants.

On the southern edge is Navalmoral de La Mata (population 19,000). The regional capital of Mérida is 200km to the south; in fact La Vera is more in the influence of the State capital Madrid, at a similar distance to the east.

To the north-east is the continuation of the Tiétar river valley, reaching up into the mountains of the Central System and connecting Extremadura to the meseta of Castilla y León

The limits of the Learning Area

La Vera district contains 19 municipalities, which define the administrative boundaries of the area. However, HNV-Link is targeted on the mid-higher altitude parts of the district, and on the pastoral land that dominates these parts. This is where the majority of Natura 2000 habitats are found, in a mosaic largely created by centuries of pastoralism. The 3 western municipalities (in blue) are not included in the Project, as they do not have the typical uplands of La Vera

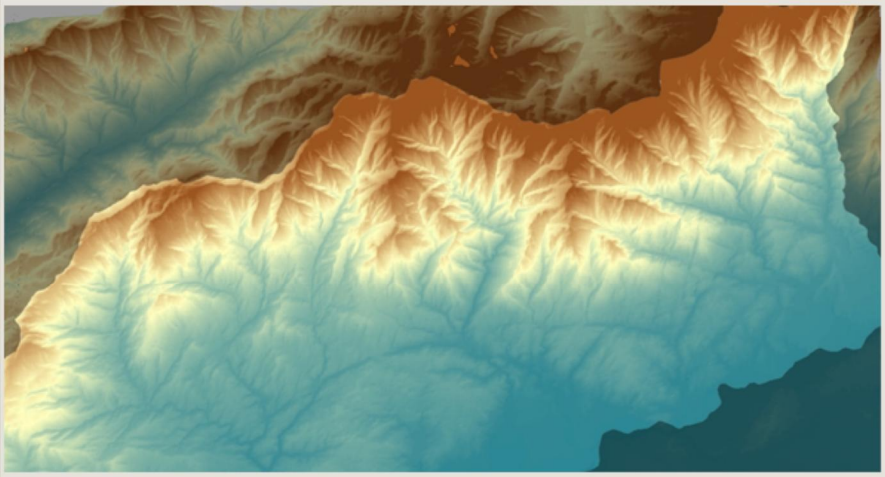
2014	Municipalities	Settlements	Extent	Population	Density
La Vera	19	21	883 km²	25.072 inhab.	28,39 inhab/km²

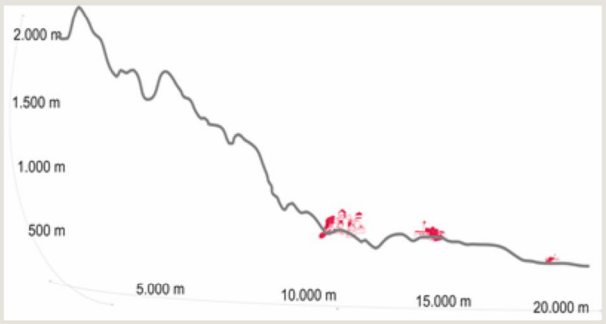
LA limits

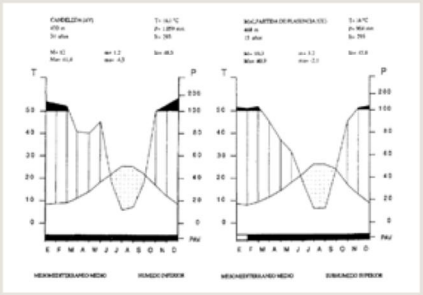
La Vera is a historic district, dating from the Middle Ages and the communities that were established around the city of Plasencia and evolved into the current pattern of settlement.

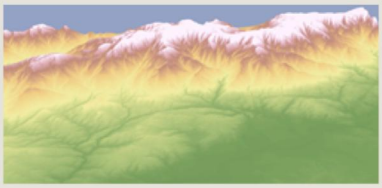
La Vera contains 19 municipalities and 21 towns or villages, but is not itself an administrative unit (there are certain planning functions). The dominant municipality is Jaraíz de La Vera, at the south-western side of the Learning Area.

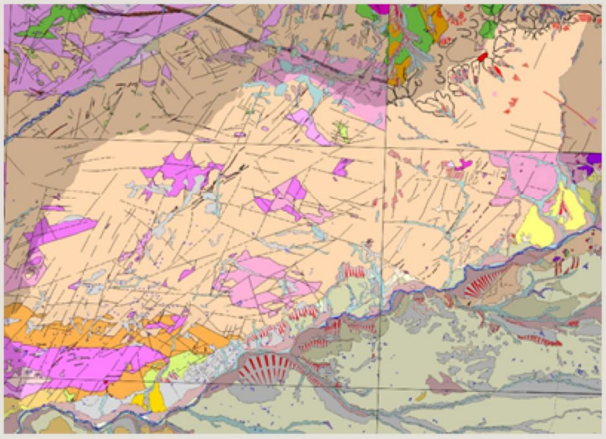
Slopes and granite: arquitects of the southern slopes of Gredos







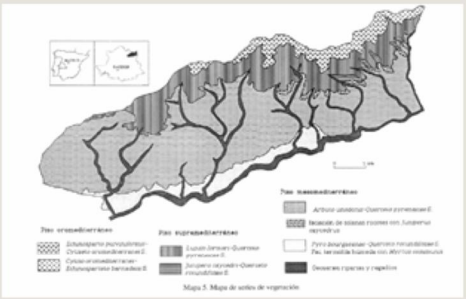




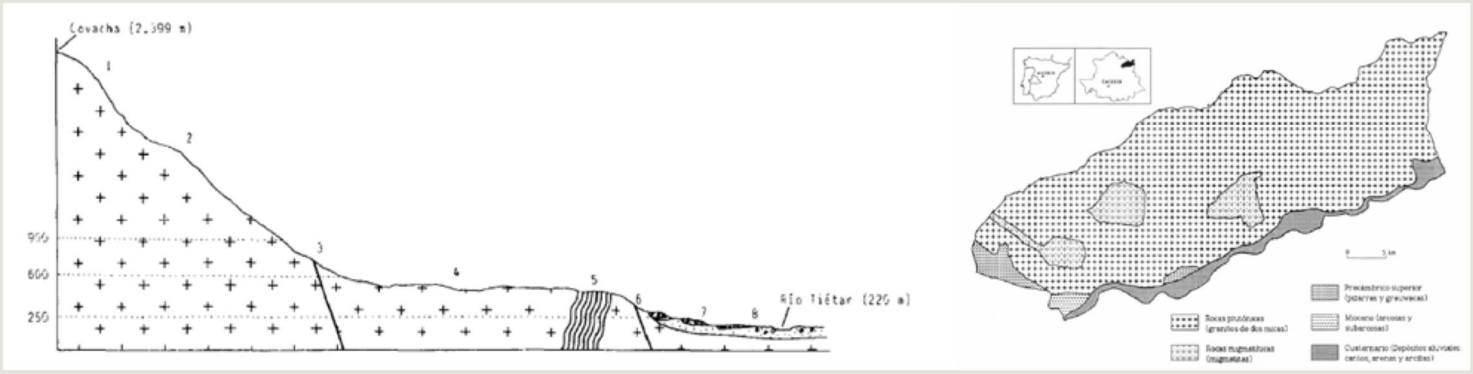
La Vera is a massive slope of **great lithological homogeneity** from the peaks of the Central System to the river Tiétar valley. The gradient is a defining factor for the characteristics of the area.

The **climate** is typical of Mediterranean mountain zones, also with a clear **altitudinal differentiation**. However, the southern orientation and **atlantic influences** from the west have the effect of reducing the extremes of the climate and favouring **seasonal rains**. At a local level, key factors are **orientation** (shady or sunny), position on the slope, and exposure.

Soils and physiographic units

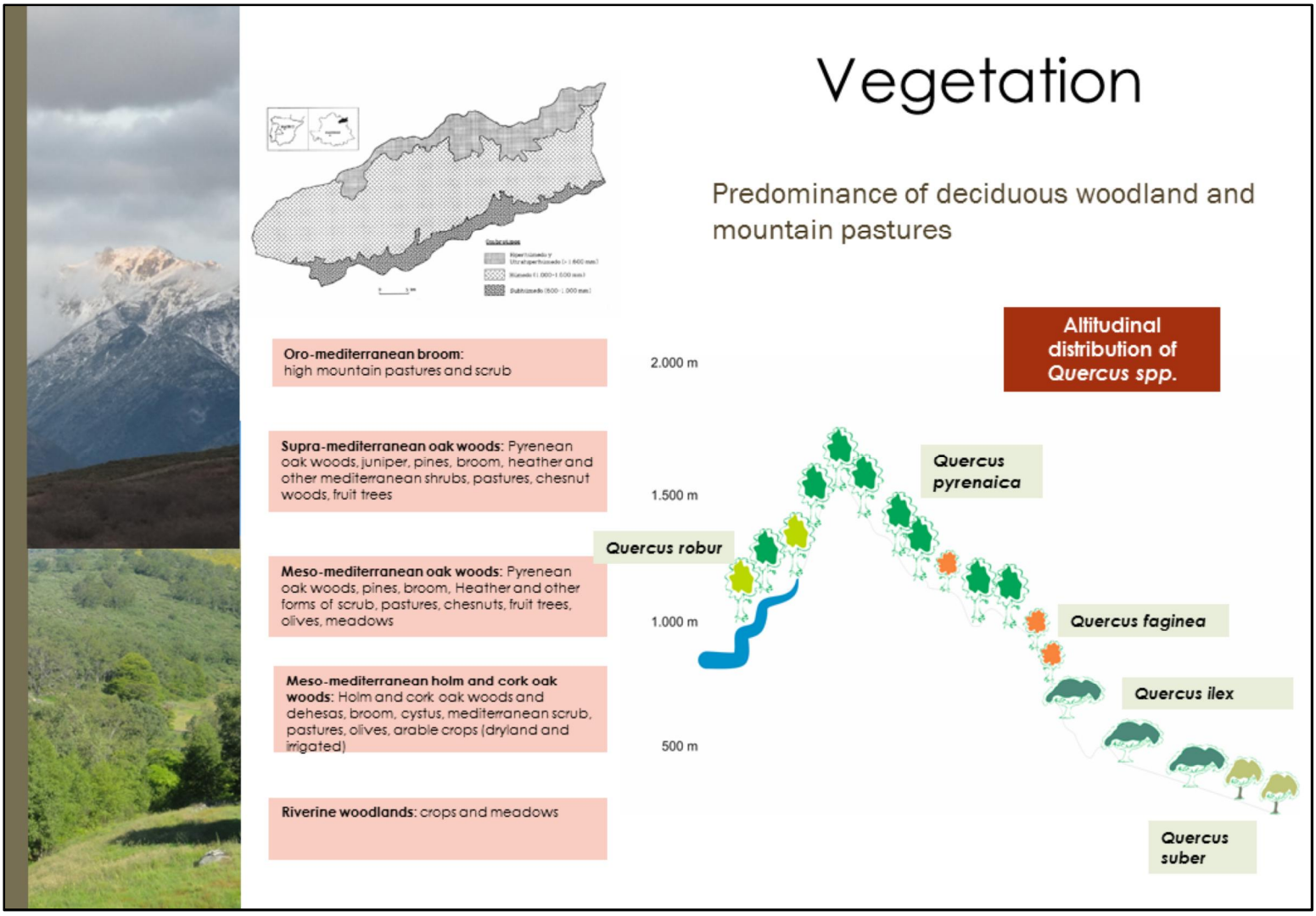


UNIDAD FISIOGRÁFICA	Lithology	Altitude	Dominant soil types
I. Peaks	Granite	>1.200	Afloramientos rocosos, Litosoles dístricos, Rankers
2. Slopes	Granite	800-1.200	Rankers, Cambisoles húmicos, Afloramientos
3. Foothillls	Granite	600 -800	Regosoles - Litosoles - Cambisoles dístricos, Afloramientos
4. La Vera platform	Granite	400 - 600	Regosoles-Cambisoles dístricos, Afloramientos, cambisoles crómicos
5. Southern escarpment	Granite	250 - 400	Regosoles - Litosoles - Cambisoles dístricos, Afloramientos
6. Terraces and alluvial deposits of the Tiétar floodplain	Alluvial	250	Luvisoles crómicos, Cambisoles crómicos, Fluvisoles dístricos, Cambisoles éutricos



Soils and physiographic units

La Vera can be divided into 6 main physiographic units, as shown in the slide. The HNV LINK Project focuses mainly on the foothills, slopes and peaks, which is where the main pastoral resource is located, and also including the dehesas of the lower-altitude platform. The alluvial floodplain is not included.



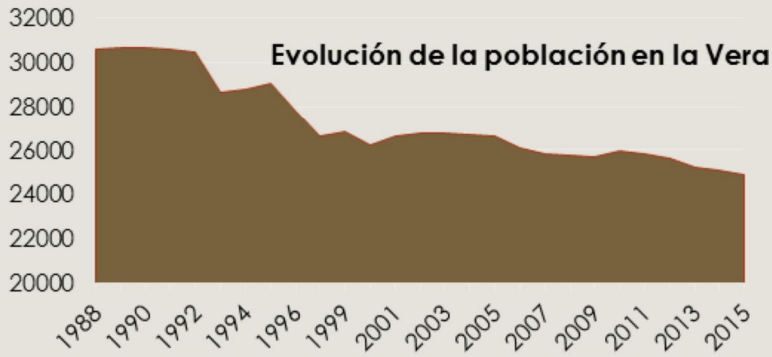
Vegetation

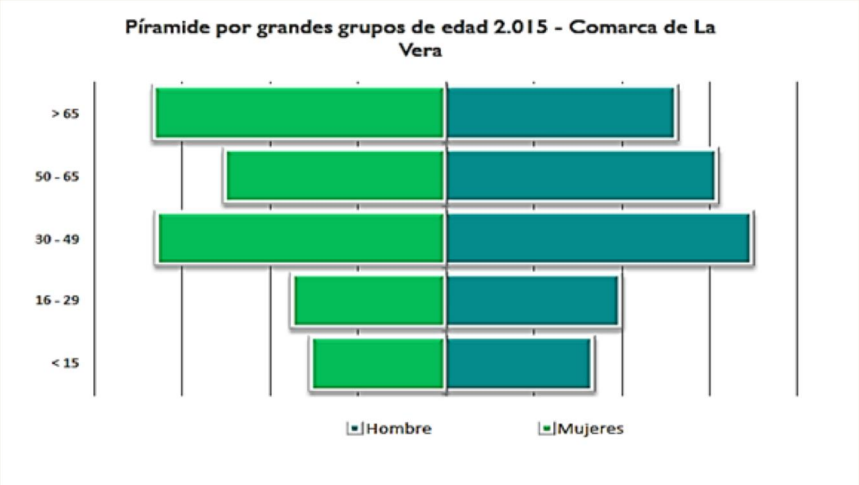
The higher parts of the mountains are dominated by extensive areas of mountain broom, with smaller patches of nardus grassland and fragments of bogs and mires.

The dominant vegetation at mid-altitudes is Pyrenean oak (*Quercus pyrenaica* Lam.), merging at lower altitudes into evergreen oaks (Holm and cork). Historic and current landuses have created a complex mosaic of woods, scrub and grasslands, interspersed with tree crops.

A population in decline in a highly appreciated area

Key indicators for La Vera	
Inhabitats living in low density áreas <10 hab/km^2 1996	449
Rurality index 1996	1,62
Inhabitats living in low density áreas hab/km^2 2014	534
Írurality index 2014	2,13
Dependency index 2007	48,06
Dependency index 2014	48,44
Work turnover rate 2007	113,99
Work turnover rate 2014	85,61
Male rate 2007	103
Male rate 2014	102,98
Population 1996	27.774
Population 2014	25.072
Population loss (1996-2014)	-2.702
% population lost	-9,73%
% Population>65 años (1996)	20,32%
% Population >65 años (2014)	24,61%
Ageing (1996-2014)	4,29
Unemployment rate 2007	7,30%
Unemployment rate 2015	16,21%



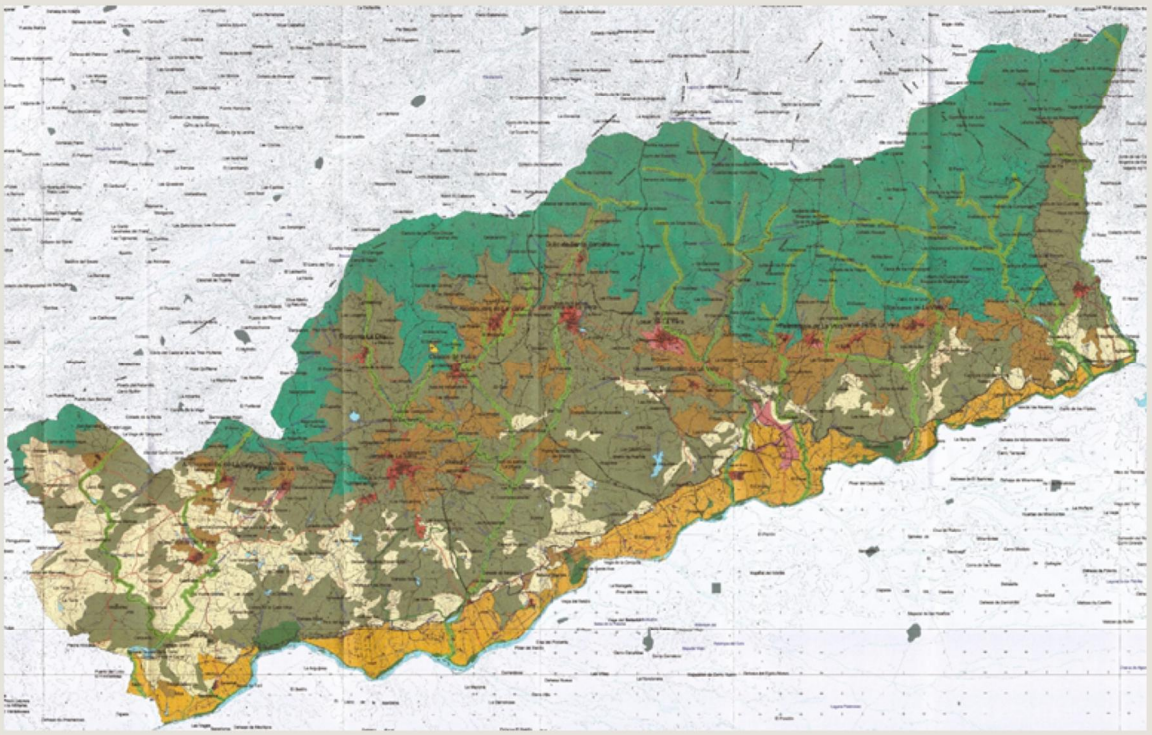


Population

The current population of La Vera is around 25,800 inhabitants, although this figure is doubled during the months of peak tourism. The largest town is Jaraíz de La Vera, with 6,400 inhabitants, a further 6 municipalities have populations of 1,000 to 3,000, and the rest are below 1,000 (7 villages have fewer than 500 inhabitants).

The population trend has been generally negative since the last quarter of the 20th century, with a 18% decline during the past 30 years.

Administrative s Structures



Land-use planning in La Vera is framed by the Territorial Plan, approved in 2008 and modified in 2014.

The regional government applies land-use planning through a grouping of municipalities (Mancomunidad) and a corresponding territorial plan for LaVera

Administrative structures

The 19 municipalities are grouped in a Mancomunidad since 1977. The functions of the Mancomunidad are largely co-ordination of certain services (rubbish, social services, sport) and territorial planning. There is a Territorial Plan for La Vera which regulates land-use planning within the framework of the regional legislation. There is also a Rural Development Strategy, produced recently by the LAG through a participatory process.

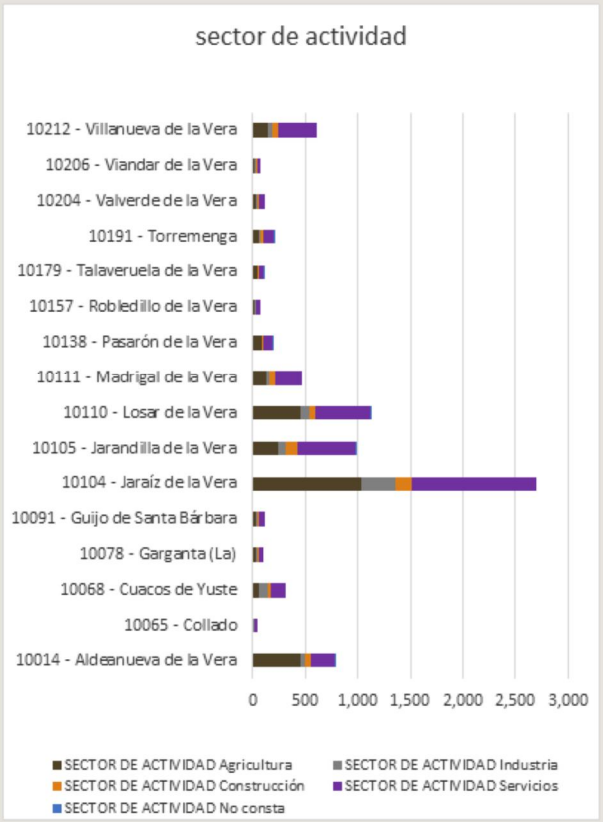
The municipalities have basic competencies for urban land-use planning. They also own large areas of public grazing and forest land (monte público) – see later slide.

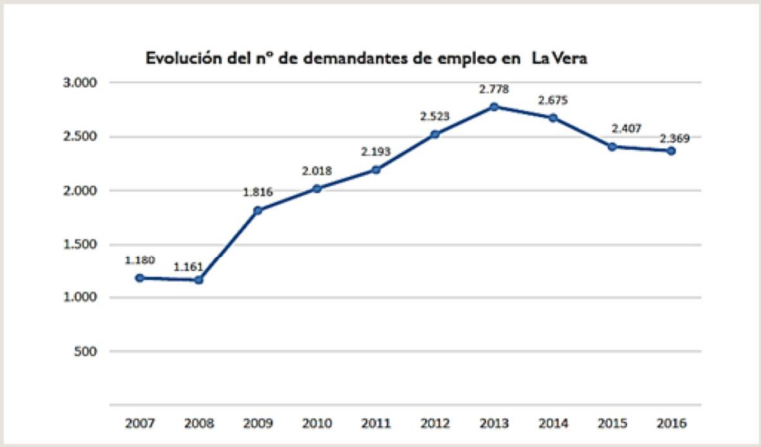
Culture and rural society

La Vera has a common set of socio-cultural and landscape characteristics, especially in the HNV areas above the lowlands:

- Four towns designated as "Historic Artistic Towns"
- Mountain-style village architecture, with narrow streets, houses of stone, timber and adobe, carved wooden balconies
- Water channels in the streets that are part of the traditional irrigation systems
- Several local fiestas of touristic value, many of them linked to pastoral culture
- Grand heritage buildings such as the **Parador in Jarandilla**, and the **Monastery of Yuste**.

Economic Trends





Services: growing as main employment source and gear of the local economy

Economic aspects

Although cropping is the main activity in La Vera, its capacity of employment is decreasing. Agriculture includes, tobacco, paprika peppers, cherries, raspberries, olives and other tree crops. Livestock is less economically significant. Organic crop production has started to increase in recent years, but is still not significant.

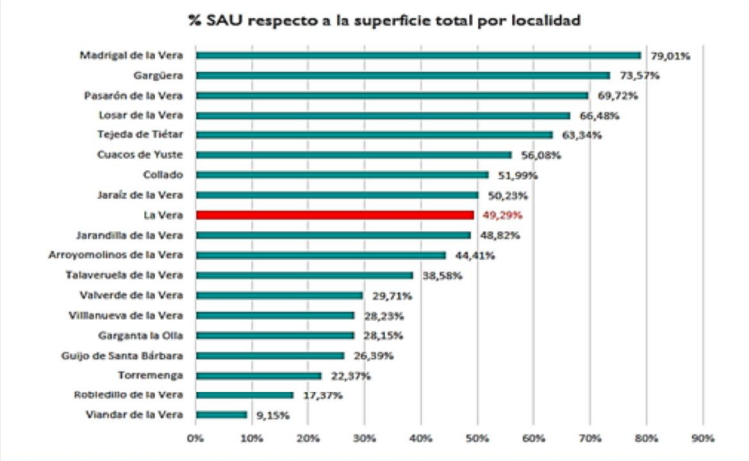
The secondary sector occupies about 16% of the population, and includes companies that process local agricultural products (paprika, olives, cheese, fruit) and products from outside the district (a large chicken slaughterhouse) but is mainly concerned with local services and construction.

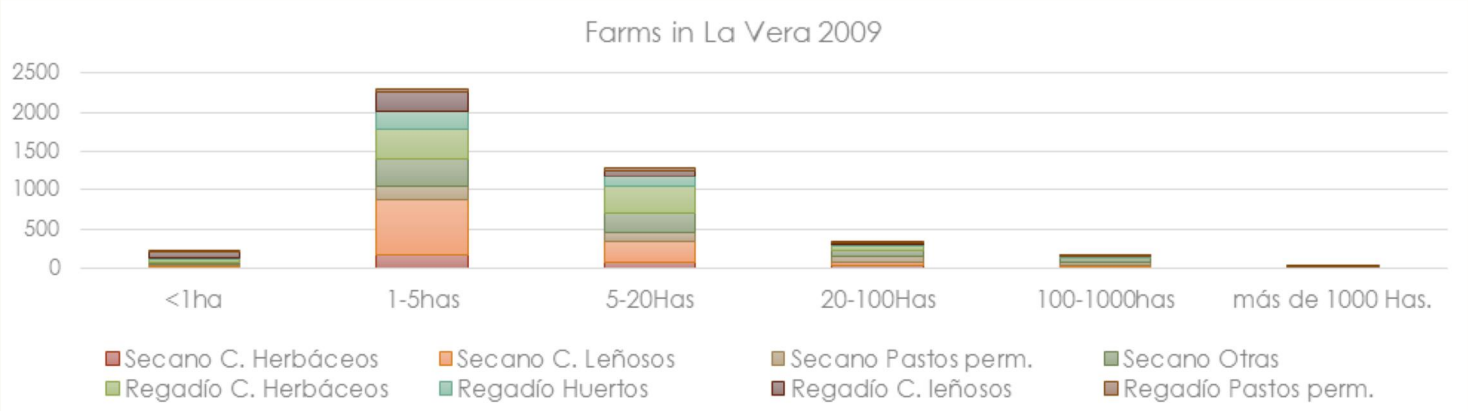
The services sector is less developed than the national average, despite the enormous tourism demand in the área, but it is consolidating as the main employment activity, specially for young workers. Tourism in La Vera is largely associated with summer and Easter holidays, although it is also an important weekend destination, due to the proximity to Madrid. Rural tourism is nevertheless not well developed in La Vera, and the concept of agri-tourism is practically unknown.
Much of the focus of tourism is on the mountain rivers as a bathing resource, leading to considerable environmental impacts on these (several of the rivers are Natura 2000 sites).

Local agricultural products, such as goat meat and cheeses, are present but not promoted strongly by the restaurant sector.

Farming and Land Use

2006 census	Landuse	Extent (Ha)
Dryland	Arable	1487,2
Dryland	Permanent crops	2383,8
Dryland	Perm. Pasture	22366,31
Dryland	Other	8695,14
Irrigated	Arable	4087,51
Irrigated	Vegetables	9,12
Irrigated	Permanent crops	819,84
Irrigated	Perm. Pasture	1209,95
TOTAL		41.158





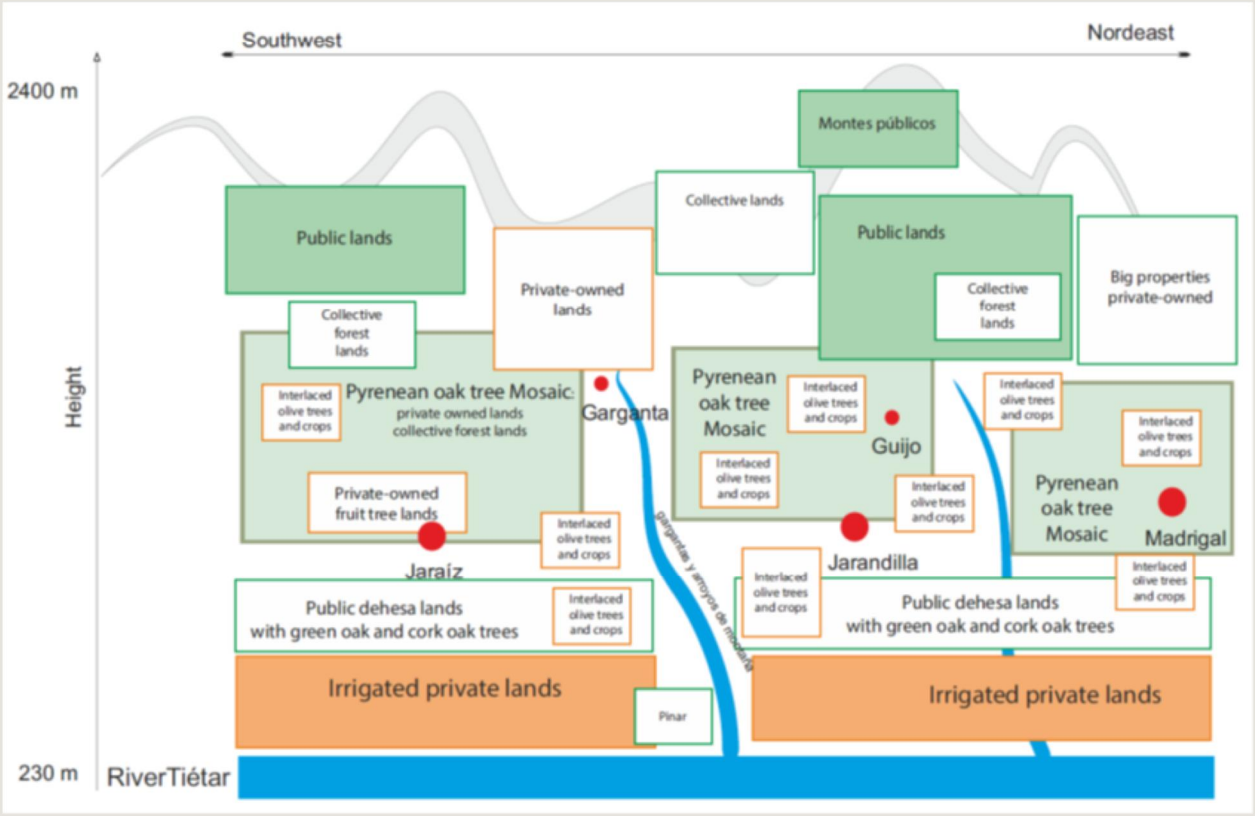
Farming and landuse

More than 50% of the UAA is under permanent pasture, but crops are economically dominant. Tobacco and paprika peppers are now grown almost entirely in the irrigated river valley, but traditionally were grown also up to mid-altitudes on terraces. Nowadays the mid altitudes are mainly under tree crops, especially olives, cherries, figs, chestnuts, and more intensive crops such as raspberries and kiwis.

Note that the figures above do not include forest land, which covers an approximately similar extent as farmland, and where grazing has traditionally been a main use. The differences between useful farmland and total Surface are related to the position on the slope, being more forestal the municipalities which limits with the top of the mountains and more farmland the lowlands municipalities.

Tobacco and paprika peppers in the floodplain, olives and other fruits in the foothills

Pattern of land ownership in La Vera

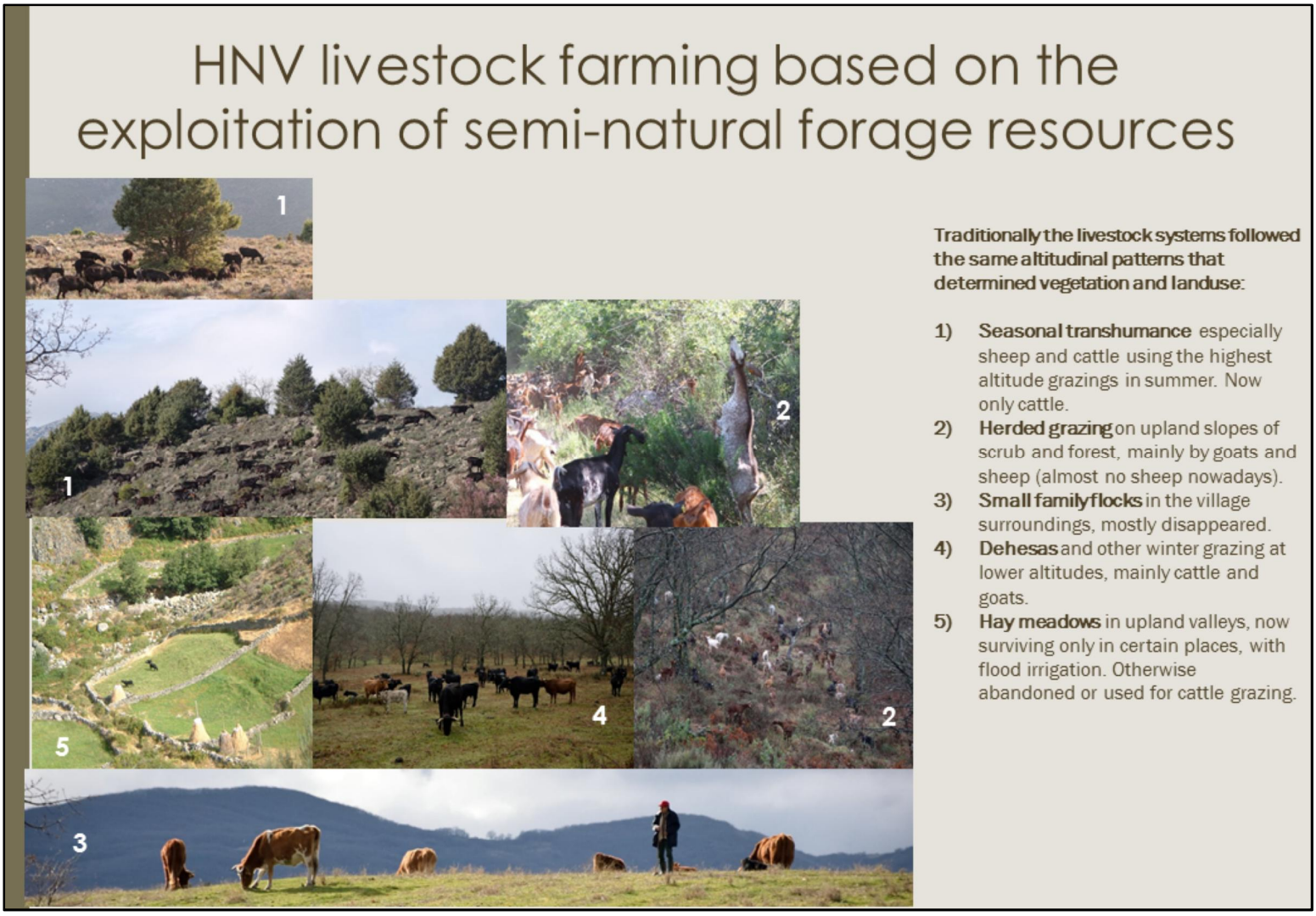


Pattern of land ownership in La Vera

Land ownership, access to resources and decision-making over the management of the land resource are key questions for understanding the HNV farming system in La Vera. The land ownership structure is complex, including public land used in common, private land used in common, and private land under individual use.

In broad terms, the diagram shows the following pattern:

- The highest mountain areas are mostly private lands, in many cases owned in common by private share-holders (many local people have inherited small shares, a few people have accumulated a large amount), or owned by big private landowners (especially in the north-east of the district). Hunting is a main activity on these lands, although grazing is still common. All municipalities have one or more public lands, used for a mix of grazing and forestry activities. There are 31 of these public "montes", dominating the uplands of the district and also including dehesas at lower altitudes, where there are also private grazings. Public "montes" cover a total of 18,600 ha. Their management is the responsibility of the regional forest authorities. The grazing rights are let to local farmers on an annual basis. Only one of these "montes" has a detailed management plan, for the others there is a simple description (often out of date) of the number of animals permitted and the rules the graziers should follow.
- In 1 municipality (Losar) the public land of the municipality extends to the high mountain (this is the largest monte público in La Vera); in all the other municipalities, the higher altitude land is in private hands.
- At the altitude of the main towns and villages there is a dense mosaic of private farmland minifundia and forest parcels (sometimes on shared ownership), mixing in many areas with public lands.
- In the river valley, the land is mostly larger scale private farmland.



HNV livestock system

Traditionally, practically all of the uncropped land in la Vera was used for grazing, with strong seasonal patterns. The higher altitude herbaceous pastures were used in summer by large flocks of shepherded sheep, now largely disappeared and replaced with suckler cattle which can be left largely unattended for several days.

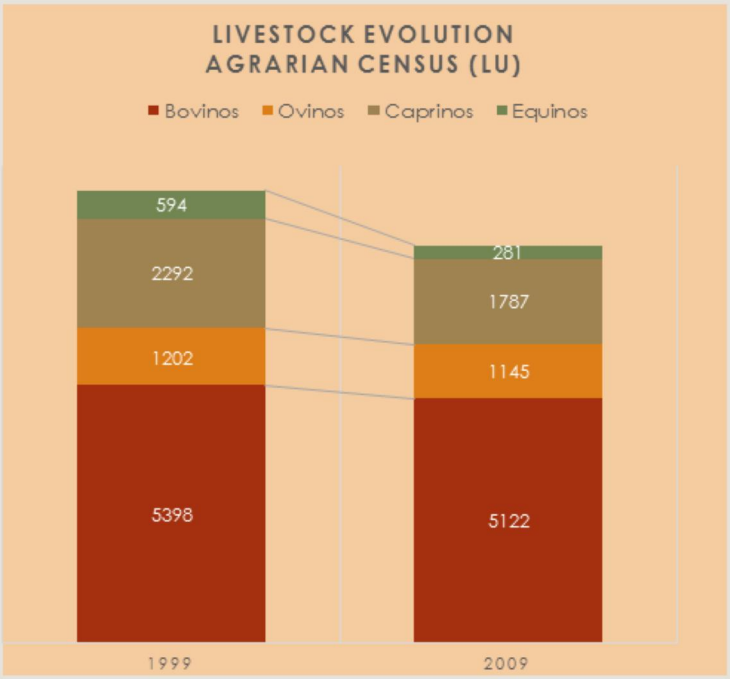
The upland slopes are a mosaic of wooded and open land with a mixed use of forestry (firewood, mushrooms, previously charcoal) and herded goat grazing/browsing.

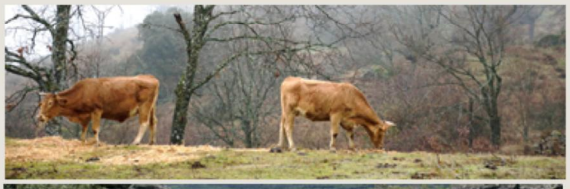
At lower altitudes are dehesas and other grazings used mainly in the winter by cattle and goats. Short transhumance (1 or 2 days) from the lower altitudes to upland and high mountain summer grazings is still practised by significant numbers of cattle and goats, but is in decline.

Traditionally hay meadows were widespread in the upland valleys, but most have been abandoned or are used for seasonal cattle grazing. Irrigated hay meadows survive in some places, such as Guijo de Santa Bárbara, produced hay for cattle.

Generally, suckler cattle spend Winter in the public dehesas of the foothills of La Vera or in rented dehesa pastures outside La Vera. In the summer they move to higher mountain pastures. Goats nowadays tend to be found grazing at mid-altitudes and in the foothills, with not so many making seasonal movements to the high mountains.

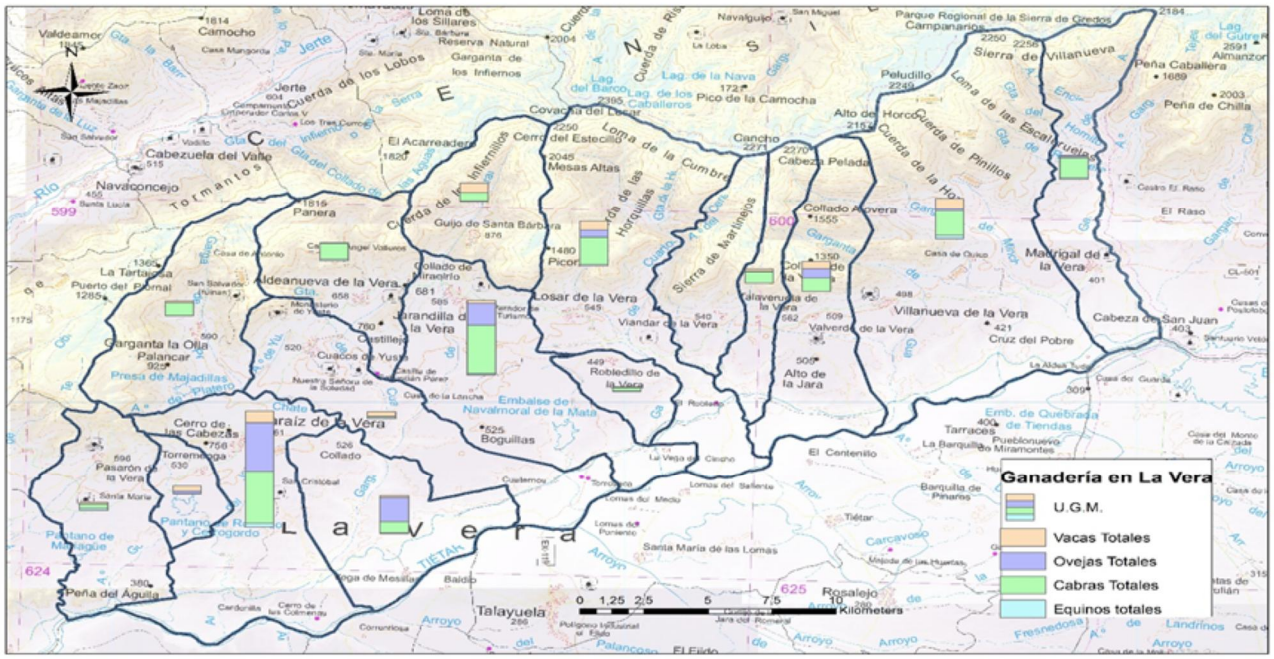
Declining livestock production





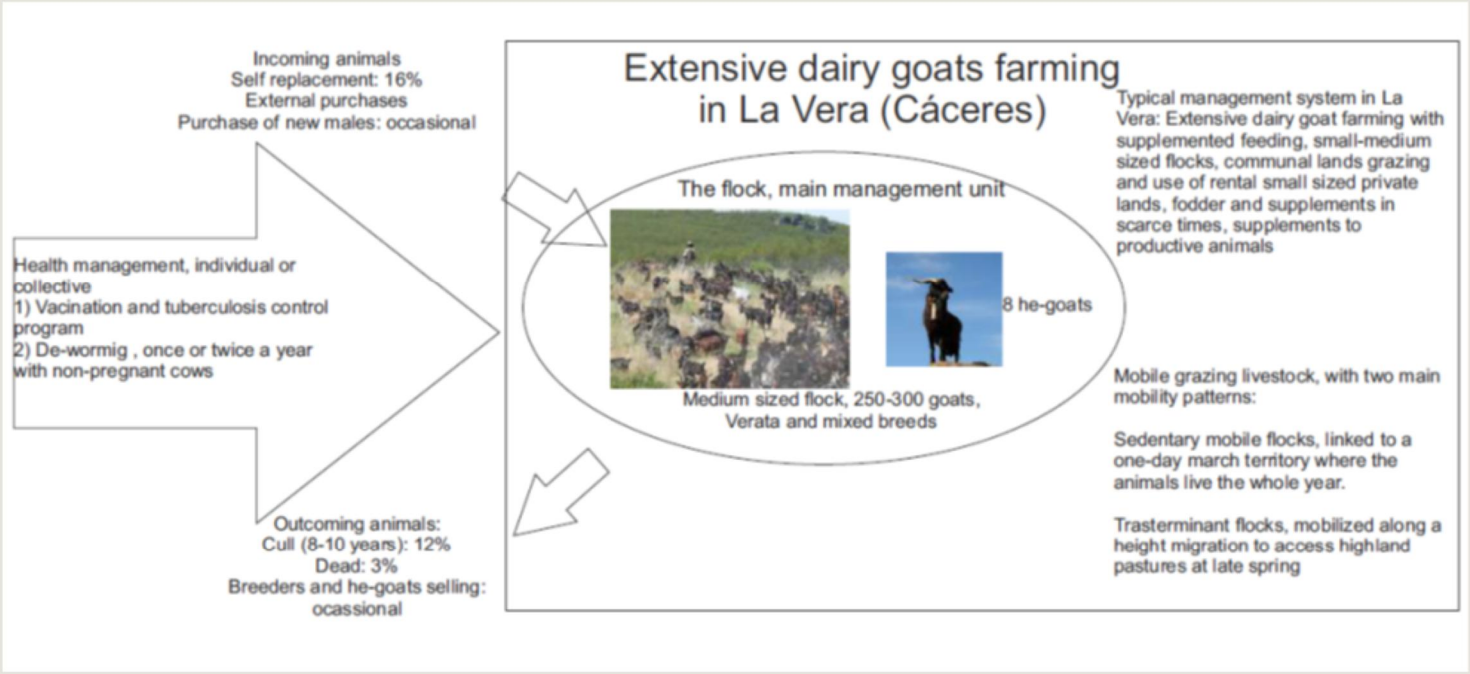
The figures show a descending pattern in livestock farming. Despite the difficulty of getting proper figures, our social analysis shows that this declining is affecting more heavily to grazing livestock, specially dairy goats, that is being forced to settlement or abandonment.

Distribution of livestock by municipality (2014)



Data from MAPAMA (2014), author's own graphs

Goat farming in La Vera



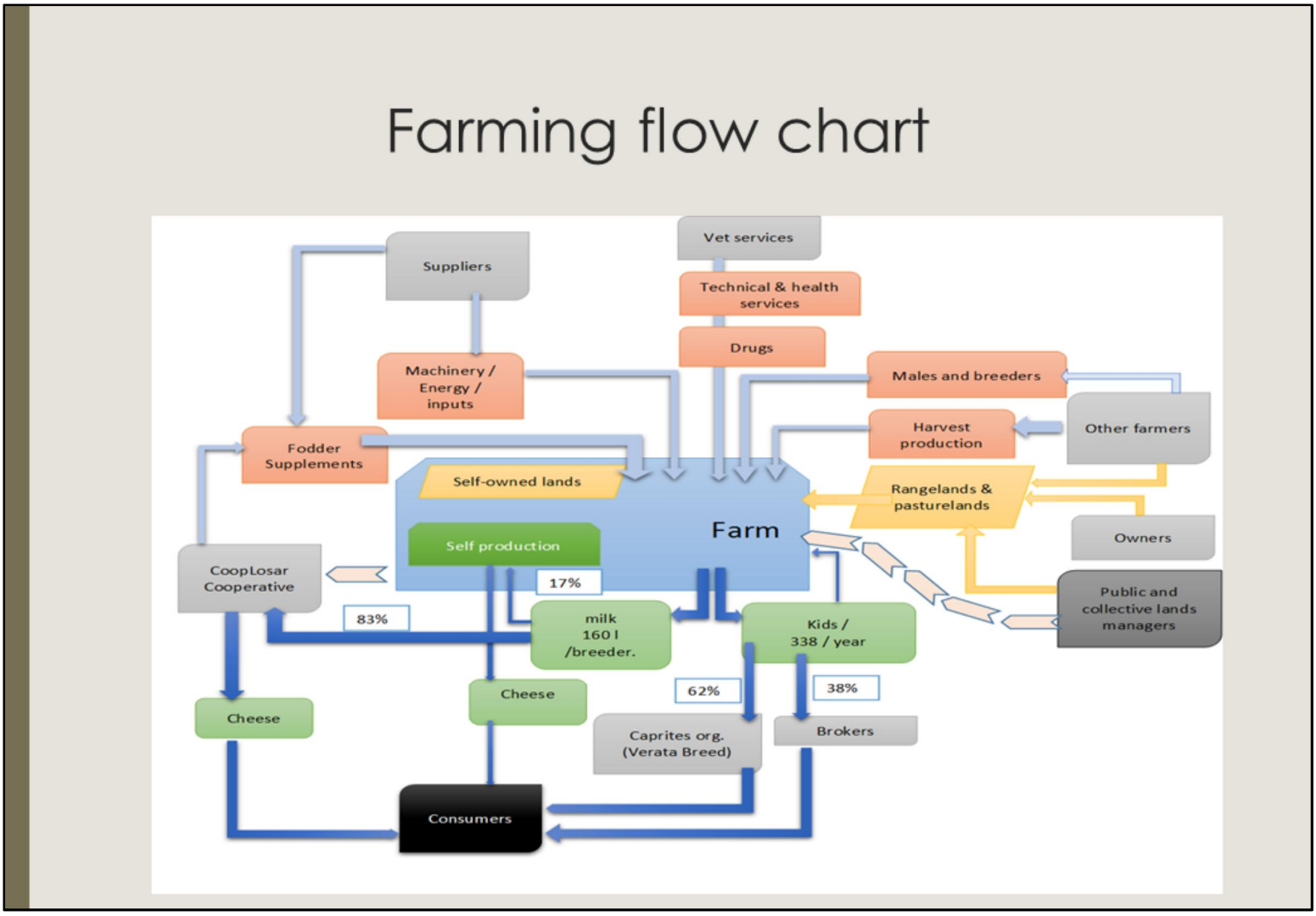
The typical extensive goat farming system in La Vera.

Each holding is different, and there is a range of feeding systems, from those that are almost entirely dependent on semi-natural forage at one extreme, to those that are fed largely indoors on concentrates at the other.

As far as there is a typical system, this is a dairy goat farming system based on extensive grazing of a mosaic of semi-natural vegetation types, with some supplementary feeding (cereals and concentrates). Broadly speaking, we can define two sub-types:

- **Traditional extensive system**: small flocks (200 animals approx.), feeding almost exclusively from grazing and browsing on unfenced comunal pastures, mainly in the uplands, milking by hand, rudimentary infrastructure.

- **Semi-extensive system:** larger flocks (275 animals approx.), births spread through the year, more supplementary feeding, more housing, better infrastructure, sometimes mechanical milking.



Farm management flow chart

Pasture use

- Basically two strategies: 1) daily grazing circuit from farm base, possible variations during the year. 2) local trasterminance (DEFINE) between foothills and mountains.
- Goat farms in particular have very limited own land (just the farmstead, or shed and corral). Grazing land is usually rented, either public common land or private land often shared with hunters.
- Approx apparent average stocking density 3.2 goats/ha (without counting common land)

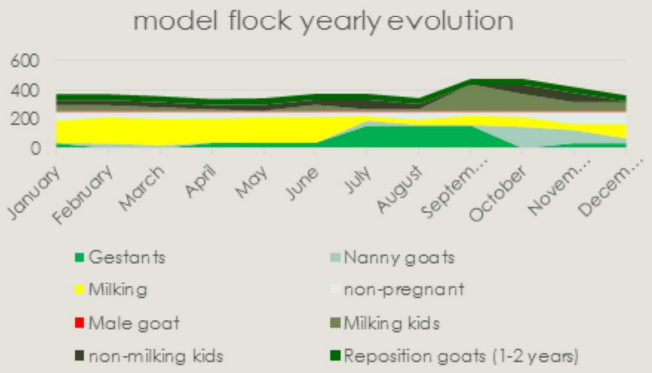
Feeding

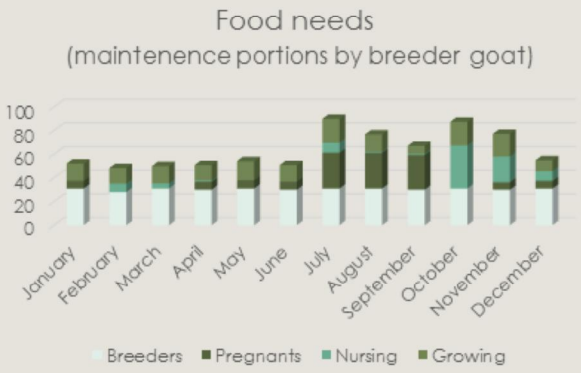
- HNV system is based on grazing as main source of feed
- Goats typically graze more than 6 hours per day
- Poor infrastructure and facilities. Approx half of farms use manual milking.
- Mobility is the best strategy given the absence of infrastructure for sedentary systems
- All animals receive some supplementary feeding, typically concentrates (0.5 a 0.8 kg animal/day, 225 kg/year) and in many cases hay and straw
- In some limited cases (38%) forage is cultivated on the holding, generally less than 2ha.
- Concentrates are given at a rate typically of 1.5 kg per litre of milk produced

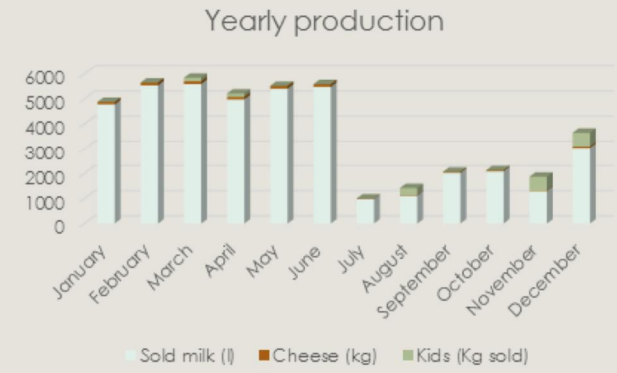
Animal health

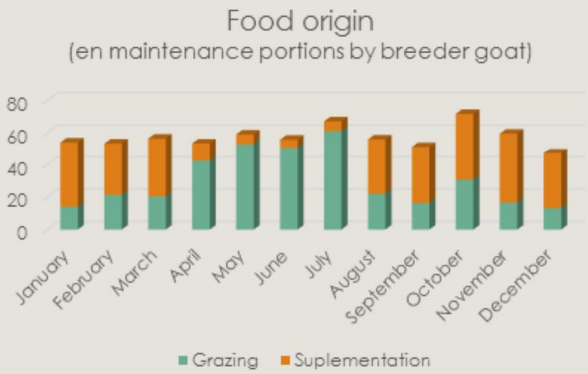
- By the individual Farmer or through an Animal Health Association (*Asociación de Defensa Sanitaria)*
- Vaccines
- TB control and eradication programme by authorities
- Parasite control once or twice per year, when goats are dry

Supplemented goat farming





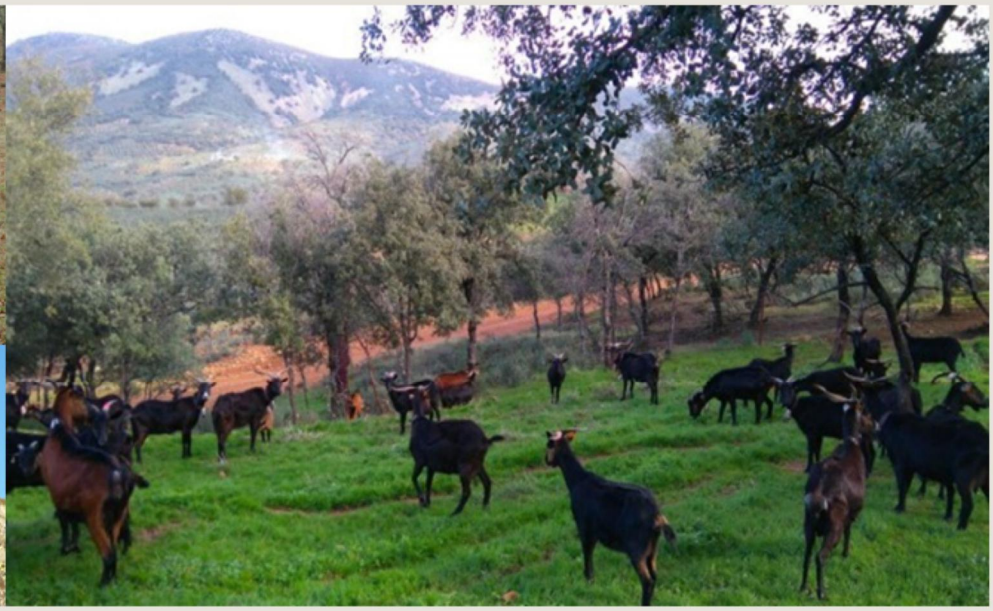




This is the basic results for the most common model of goat management.
These charts are being used to analyse the bahaviour of different practices in La Vera, to assess their performance and the impact they could suffer from policies and current trends.

Native breeds

The verata goat (and the "vellosa", another local breed that is not officially recognised), are replaced on many holdings by more productive but less hardy dairy breeds, less suited to the more extreme mountain grazing conditions. Grazing gradually declines as a dominant practice as housing of livestock becomes more common.
The most common bovine breed in the área is the Avileña-negra ibérica. It is the typical breed of the mountains of the Iberian central System, and very fond of the dehesa system.



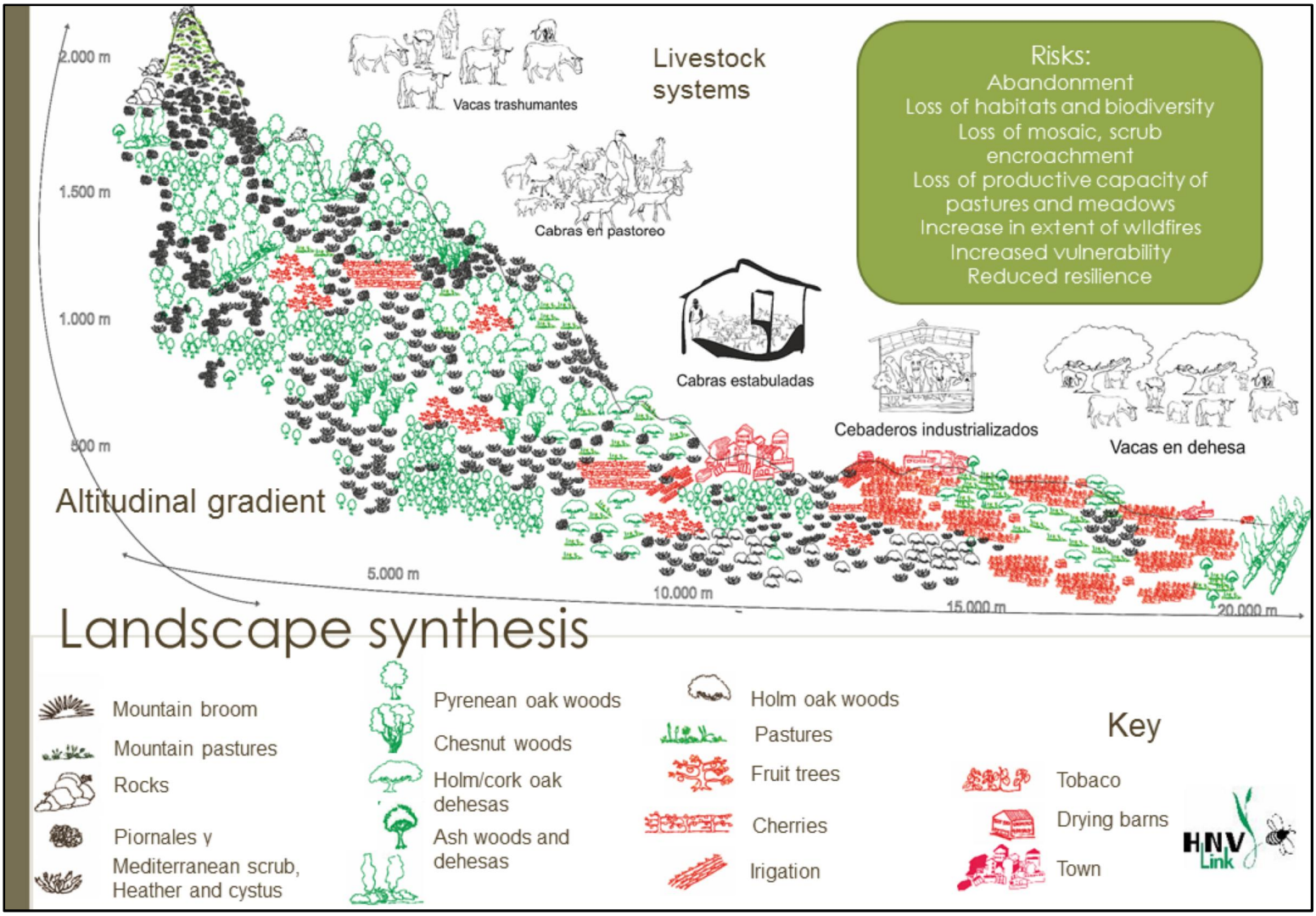
HNV livestock products

Cheese and kids (to a much lesser extent) are the main products of the HNV livestock system.
However, there are only 4 licensed cheese dairies in La Vera, and only one of these is linked to an individual goat farm (but also buys milk from other farms). There are no licensed artisan dairies, although many farmers produce artisan cheese for sale with no licence. There is no single goat farm doing licensed direct sales of milk or cheese in La Vera. This is extraordinary if we consider other similar parts of Europe, and also parts of Spain (the island of Gran Canaria has 150 artisan cheese dairies!).

Rather than adding value themselves, most farmers sell their milk to bulk buyers, whether the local cooperative COOLOSAR, or other buyers outside the region. The milk is processed into cheeses of reasonable quality, but not differentiated in the market as a special product from a natural grazing system. Prices are towards the lower end of the market. There is no PDO for La Vera cheese – this was proposed by COOLOSAR to the Regional Government but rejected by the latter.

The selling prices are low and farmers complain about them. Although the goat milk prices are higher and more stable tan cow or sheep milk they can't compensate the workload of grazing and manual milking, so buyers and cooperatives are pressing towards intensive production.

Lack of differentiation between pastoralis-based and extensive production is depleting prices of extensive kids meat, and grazing-based dairy production. In these conditions, pastoralist production is hardly profitable, and farmers rely only in their heritage (lands and facilities) to keep their business running, even under profitability.

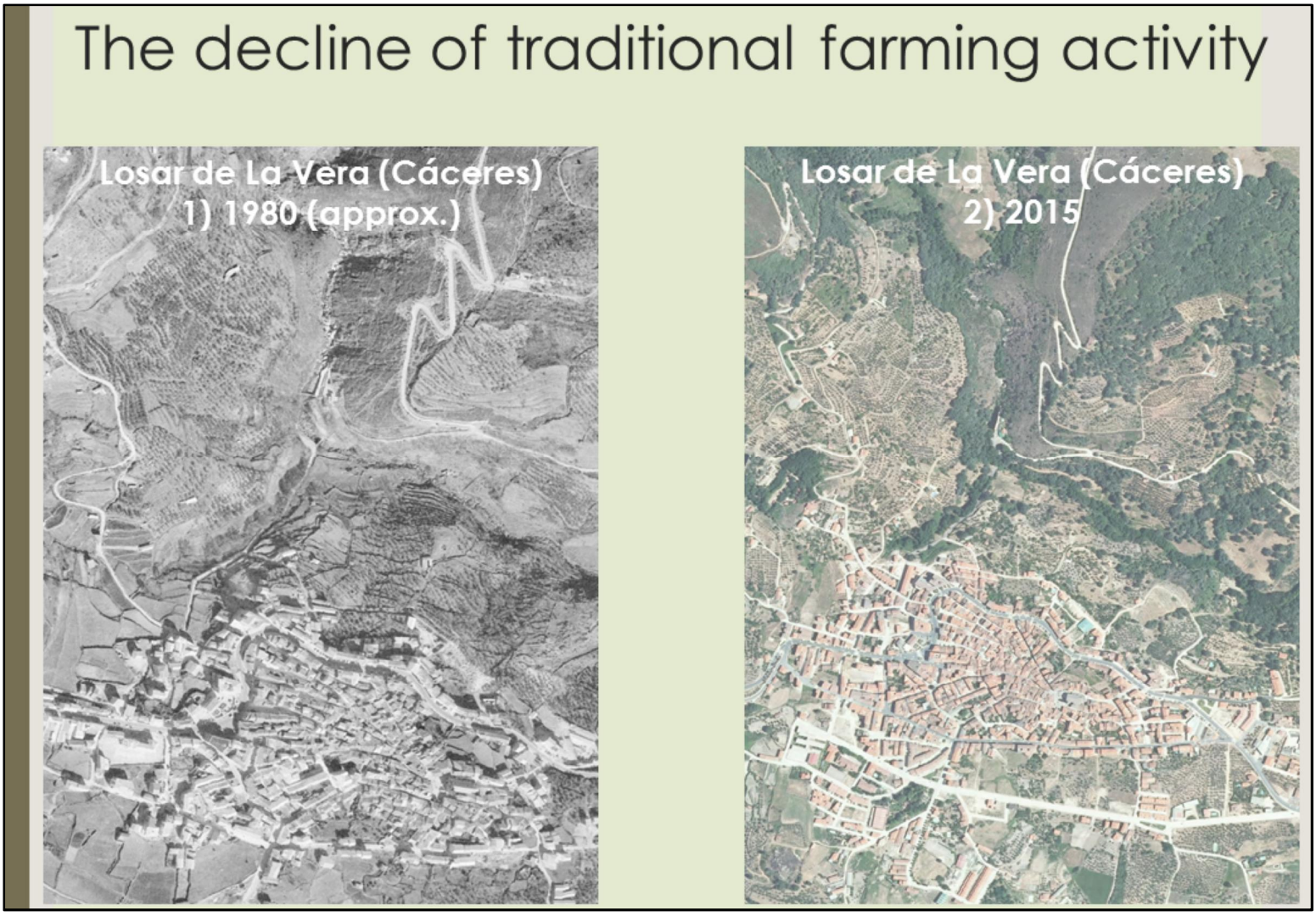


Transect of today's landscape

The transect runs from the peaks of La Covacha at almost 2.400m to the valley of the river Tiétar. It shows the main types of woodland vegetation (dominated by Pyrenean oak, but also with chesnut and, at lower altitudes, Holm and cork oak); the shrub communities (mountain broom at high altitudes, heathers and cystus in a widespread mosaic with aromatic plants such as lavendar); the pastures of Nardus and other herbaceous comunities and occasional surviving hay meadows. Tree crops are scattered at intermediate altitudes and irrigated tobacco and paprika peppers in the river valley.

Landscape changes

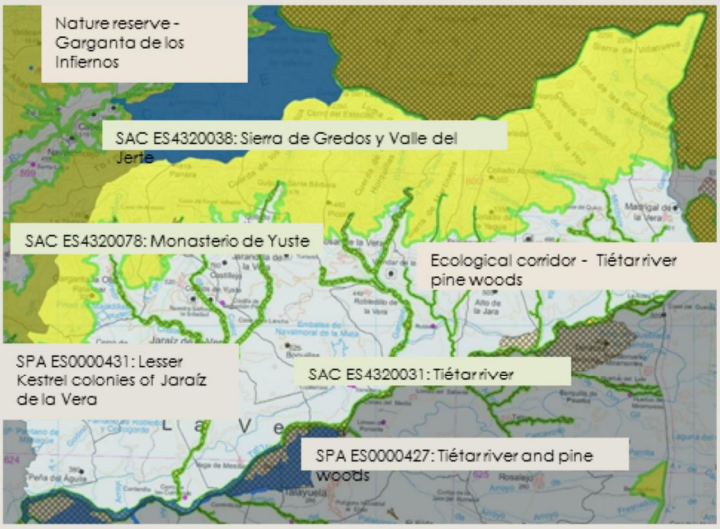
The expansion of irrigation in the Tiétar river valley saw the clearance of large areas of pine and oak forests in the lowlands and foothills. Remaining mountainous areas are protected in a Natura 2000 site.
Fire and grazing have marked the evolution of the landscape in La Vera, specially in the highlands. Until the 1970s much of the oak forests at low to mid altitudes were cleared by a combination of grazing and fire, the latter being used to regenerate pastures but also to clear land for cropping. The dense pyrennean oak sprouts were managed by clear cutting to provide fuel, livestock beds and small wood.
Clearing cuts and fire have been key factors in the evolution of the Pyrenean oak forests at mid altitudes. Although not affecting greatly their extent due to their high capacity for regeneration, mature trees are absent in some areas.

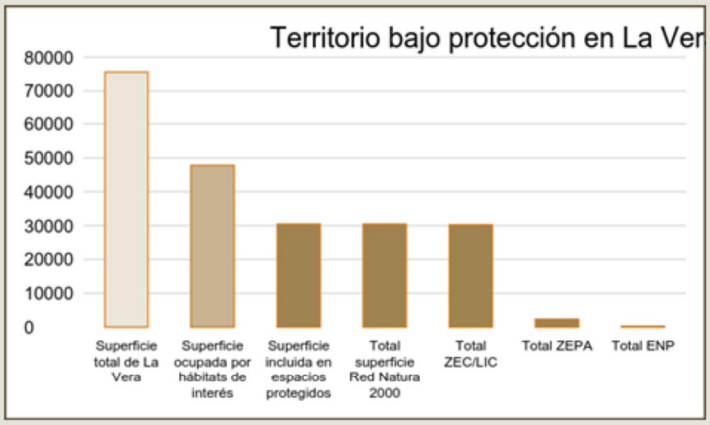


The decline of traditional farming activity

As grazing has declined over the past 30 years, and olives have been abandoned, the forest area has expanded. Where there is no grazing, regenerating Pyrenean oak creates a dense, impenetrable vegetation in some areas. Lack of use has also seen the steady loss of traditional paths, springs, stone walls, shepherds huts and barns. The landscape is littered with their abandoned remains.
At higher altitudes, juniper has begun to colonise the landscape, gradually moving down the mountain to the level of Pyrenean oaks.
Sheep have all but disappeared. Dairy cattle, previously common around villages, have also gone. Cattle are now kept for meat, especially at higher altitudes. They use mountain pastures in summer and move down to lower altitude dehesas (some are commons, some are private fenced pastures) for the winter.

Natura 2000 in La Vera





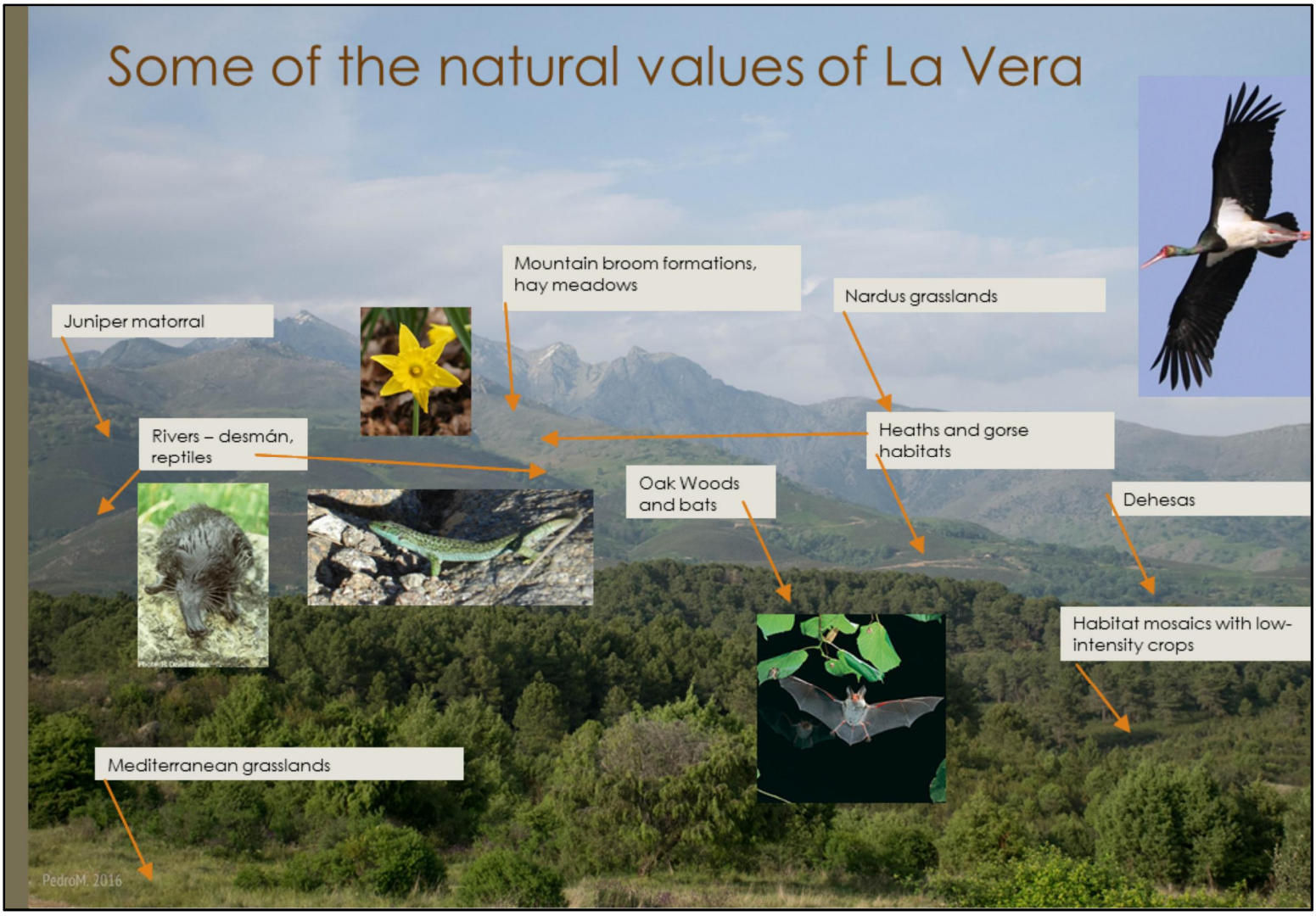
Natura 2000 in la Vera

Tipo	Nombre	Superficie en La Vera	Superficie del espacio	Superficie fuera de La Vera	% en La Vera	CódigoSitio
ZEC/LIC	RIO TIETAR	2066,82371	4320,99113	2254,16742	47,83%	ES4320031
ZEC/LIC	SIERRA DE GREDOS Y VALLE DEL JERTE	28124,3839	69526,9273	41402,5434	40,45%	ES4320038
ZEC/LIC	MONASTERIO DE YUSTE	13,8098427	13,8098427	0	100,00%	ES4320078
ZEPA	RIO Y PINARES DEL TIETAR	2337,03539	8716,4708	6379,43541	26,81%	ES0000427
ZEPA	COLONIAS DE CERNICALO PRIMILLA JARAIZ DE LA VERA	33,1646806	33,1646806	0	100,00%	ES0000431

Several Natura 2000 sites covering a large area of HNV land

Natura 2000 in La Vera

Most of the mid-high altitude zone of the mountains in La Vera is designated as SAC ES4320038: Sierra de Gredos y Valle del Jerte. This site covers over 40,000 ha, of which 40% is within the district and includes a large part of the HNV farming system.
Other important Natura 2000 sites are the Tiétar river and several of its tributaries that come down from the mountains, thus connecting the upland SAC with the river SAC.



Selection of species for which the upland SAC is designated

Plants

Narcissus minor subsp asturiensis (Narcissus asturiensis)
Veronica micrantha
Isoetes velatum subsp. asturicense (Isoetes boryana)

Narcissus pseudonarcissus
Omphalodes brassicifolia
Veronica micrantha

Invertebrates

Lucanus cervus
Pyrgus sidae (BUTTERFLY DEPENDENT ON HAY MEADOWS, GREDOS HAS ONLY POPULATIONS IN SPAIN, BUT IT HAS NOT BEEN IDENTIFIED IN LA VERA)

Bats

Myotis bechsteinii
Rhinolophus euryale
Rhinolophus mehelyi
Nyctalus lasiopterus

Birds

Ciconia nigra
Aquila chrysaetos
Pernis apivorus
Lanius collurio
Luscinia svecica
Anthus campestris
Milvus milvus

Other vertebrates

Iberolacerta cyreni (Iberolacerta monticola)
Galemys pyrenaicus

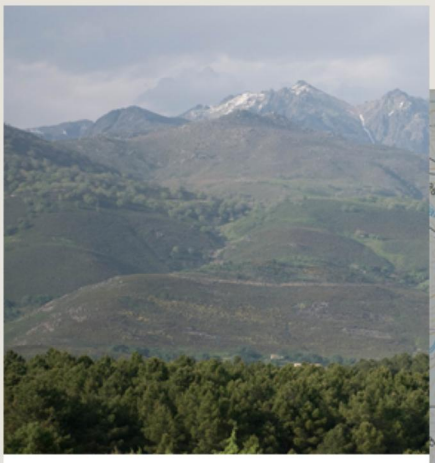
Selection of habitats associated with extensive livestock

Natura 2000 habitats	Extent in SAC (ha.)
4090 Oro-mediterranean heaths with gorse	19,782
9230 Oak woods of *Quercus robur* and *Q. pyrenaica*	17,335
4030 European dry heaths	15,131
5120 Mountain broom (*Cytisus purgans*) formations	13,501
6420 Mediterranean tall humid grasslands of the *Molinio-Holoschoenion*	2,848
*6230 Species-rich Nardus grasslands	2,051
5210 Arborescent matorral with *Juniperus* spp.	1,732
6160 Oro-Iberian *Festuca indigesta* grasslands	1,496
6310 Dehesas with evergreen *Quercus* spp.	917
6510 Lowland mountain hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	0.5

The SAC includes numerous habitats that are intimately associated with the HNV livestock system. Several of these habitats cover large areas (thousands of hectares), while others are more restricted in area (e.g. Nardus grasslands, hay meadows).

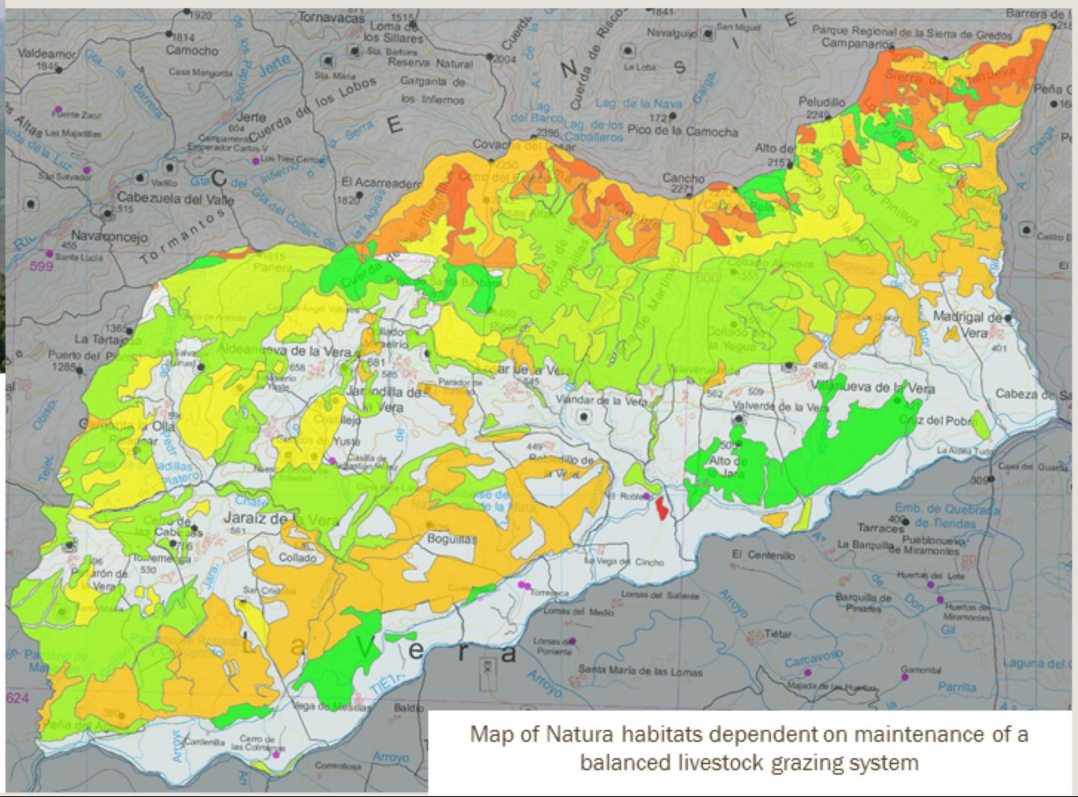
The conservation status of these habitats depends directly on the continuation of extensive livestock raising, with a balanced and sustainable use of the pastoral resource.

Association between extensive livestock and natural values of La Vera



The HNV system – summary of environmental benefits

1. High landscape diversity and biodiversity
2. Accessible landscape (tourism value)
3. Territorial heterogeneity, combined with continuity
4. Maintenance of Annex 1 habitats
5. Scrub control
6. Fire prevention
7. Maintenance of landscape features (e.g. watering points)



Map of Natura habitats dependent on maintenance of a balanced livestock grazing system

Pyrenean oak forest is the most widespread habitat, covering about 20,000 hectares

SAC Management Plan objectives for oak forest:

- Maintain an optimum grazing pressure (livestock and wild fauna) that avoids over-grazing while also preventing excessive development of scrub.

The Plan has no mechanisms for promoting this objective;

There are no RDP measures implemented for this purpose.

Annex 1 Hay meadows officially cover only 0.5 hectares, but there are more, and in severe decline

3

The semi-abandoned meadow on the right is being monitored by EFNCP under a butterfly monitoring Project – 60 species have been identified

SAC Management Plan objectives include:
On hay meadows that are no longer cut for hay, to maintain a sufficient grazing pressure to avoid scrub encroachment.
The Plan has no mechanisms for promoting this objective, and no RDP measures have been implemented with this objective.
Hay meadows were not well inventoried when the site was designated (only 0.5ha, when in reality there are a lot more). Since designation there has been no conservation action, and many of these habitats have been abandoned, or in some cases intensified, thus contravening the habitats Directive.

Many of the Natura 2000 values in the Gredos mountains are associated with mosaic pastoral landscapes

Golden eagle (*Aquila chrysaetos*)

SAC Management Plan objectives include:

- Maintain the traditional pastoral systems, as these activities contribute to the conservation of the pastures and meadows...

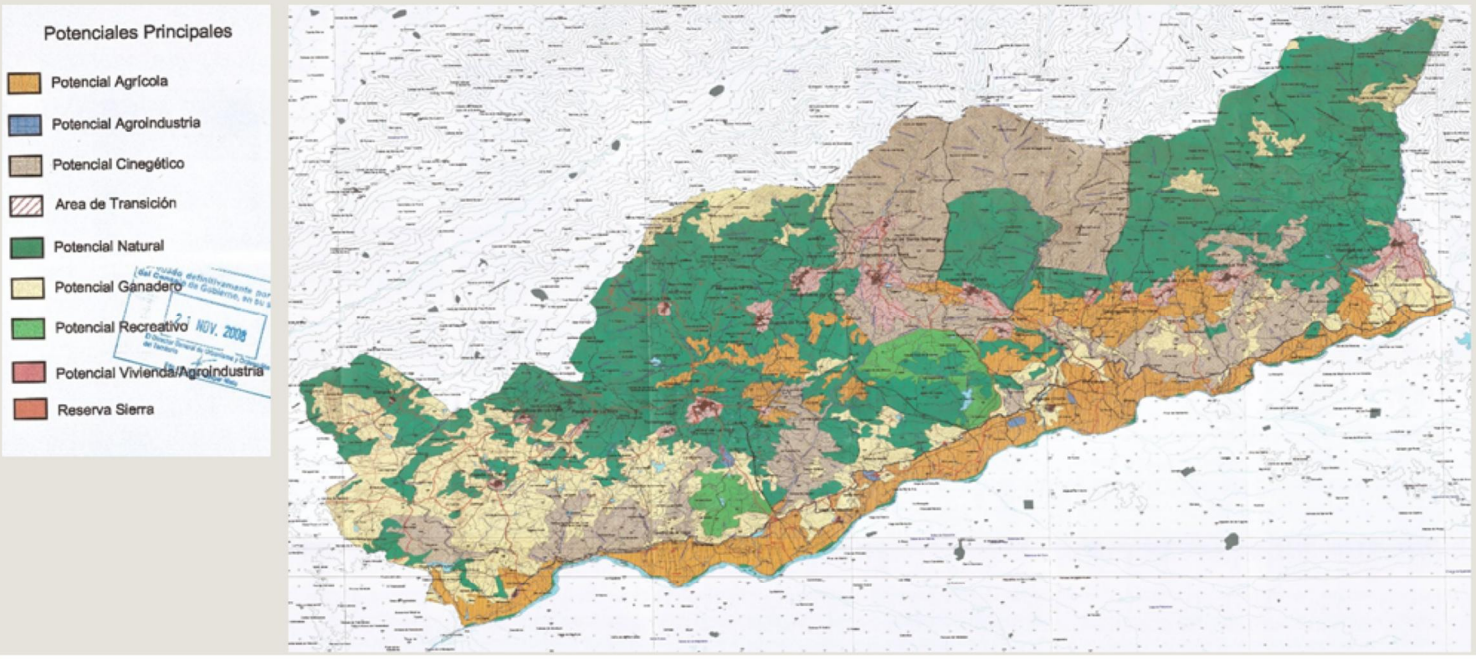
The Plan has no mechanisms for promoting this objective

Yellow-banded skipper
(Pyrgus sidae)

Red-backed shrike
(Lanius collurio)

In practice, the Habitats Directive requirements to maintain habitats and species in a favourable conservation status are not being met. The conservation actions of the regional authorities are focused on very specific habitats in small locations, notably stands of yew and holly. There is no action to influence management of the large-scale Annex 1 habitats or the wider habitat mosaic.

Planning instruments do not have measures for managing pastoral landuse



The **Management Plan for the SAC** "Sierra de Gredos y Valle del Jerte" recognises the need to maintain certain traditional pastoral practices in order to conserve many of the site's habitats, but does not offer an overall objective to maintain or develop the grazing system. The Plan is largely aspirational – it talks of the need to achieve "optimal grazing pressure" in certain habitats, but does not include any measures for pursuing this aim.

The **Territorial Plan for La Vera** refers to the loss of the extensive system as an opportunity for the recovery of woodlands. However, it also proposes an alternative path, consisting of recovering the livestock system for a future "sustainable" market.

Management planning instruments

There are several relevant planning instruments that influence land management and socio-economic development in La Vera, but overall there is no clear vision for pastures and grazing, and the key instruments are poorly developed:

- Territorial Plan for La Vera which regulates land-use planning within the framework of the regional legislation. Not well adapted to the development of small-scale infrastructures for farming and processing on rural land, as these are treated as "industrial" developments.

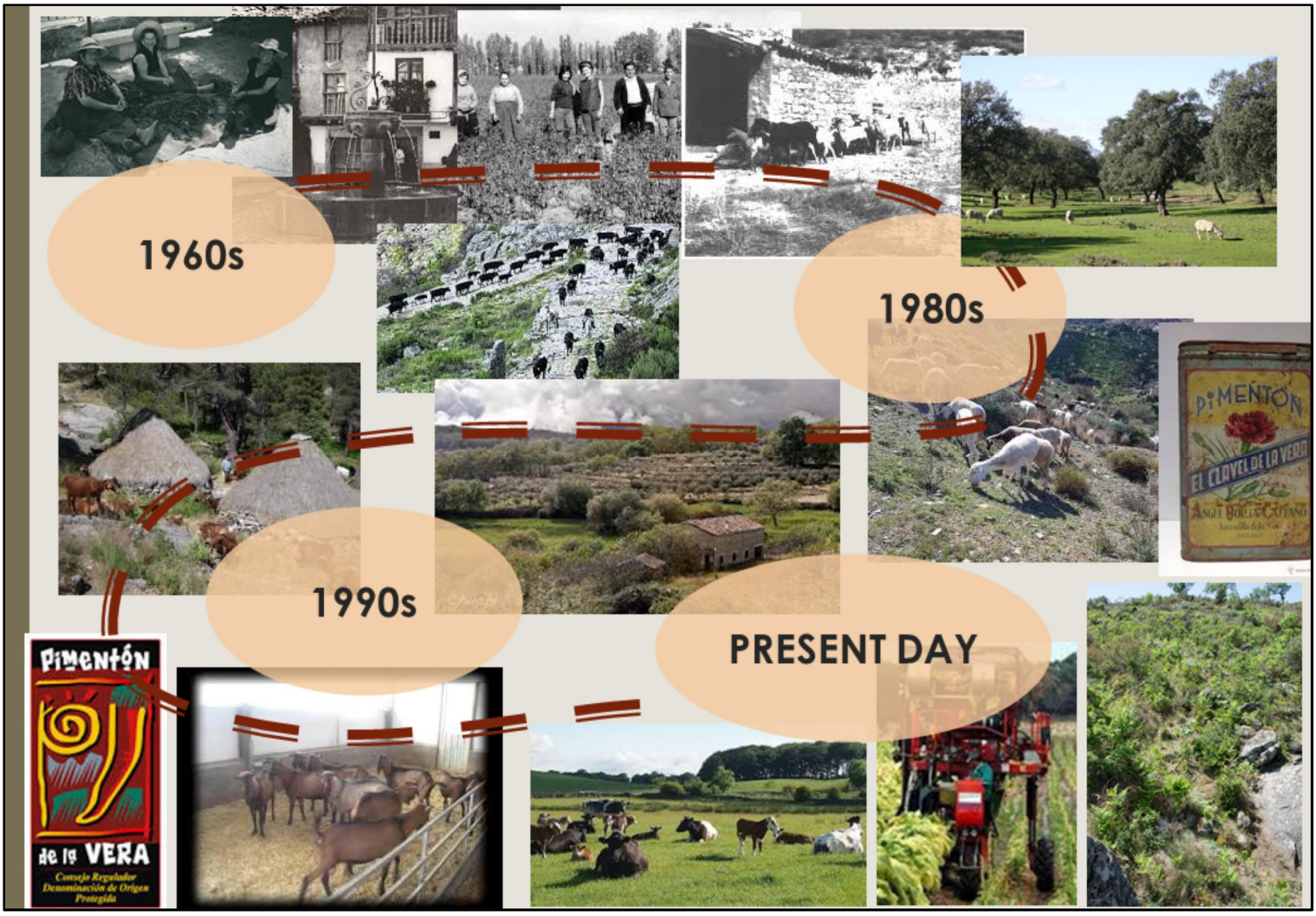
- Rural Development Strategy, produced recently by the LAG through a rather weak participatory process, which sets priorities for LAG funding in the current RDP period. This gives more attention to the crop sector than to livestock, and provides no future vision for the grazing systems of the district. It does include a line of action to support small-scale processing and value-added in the primary sector.

- SAC management plan, as referred to above this includes some notable objectives for maintaining a balanced grazing system, but there are no measures for achieving this (the key RDP options have not been implemented for this purpose), so they are merely wishful thinking.

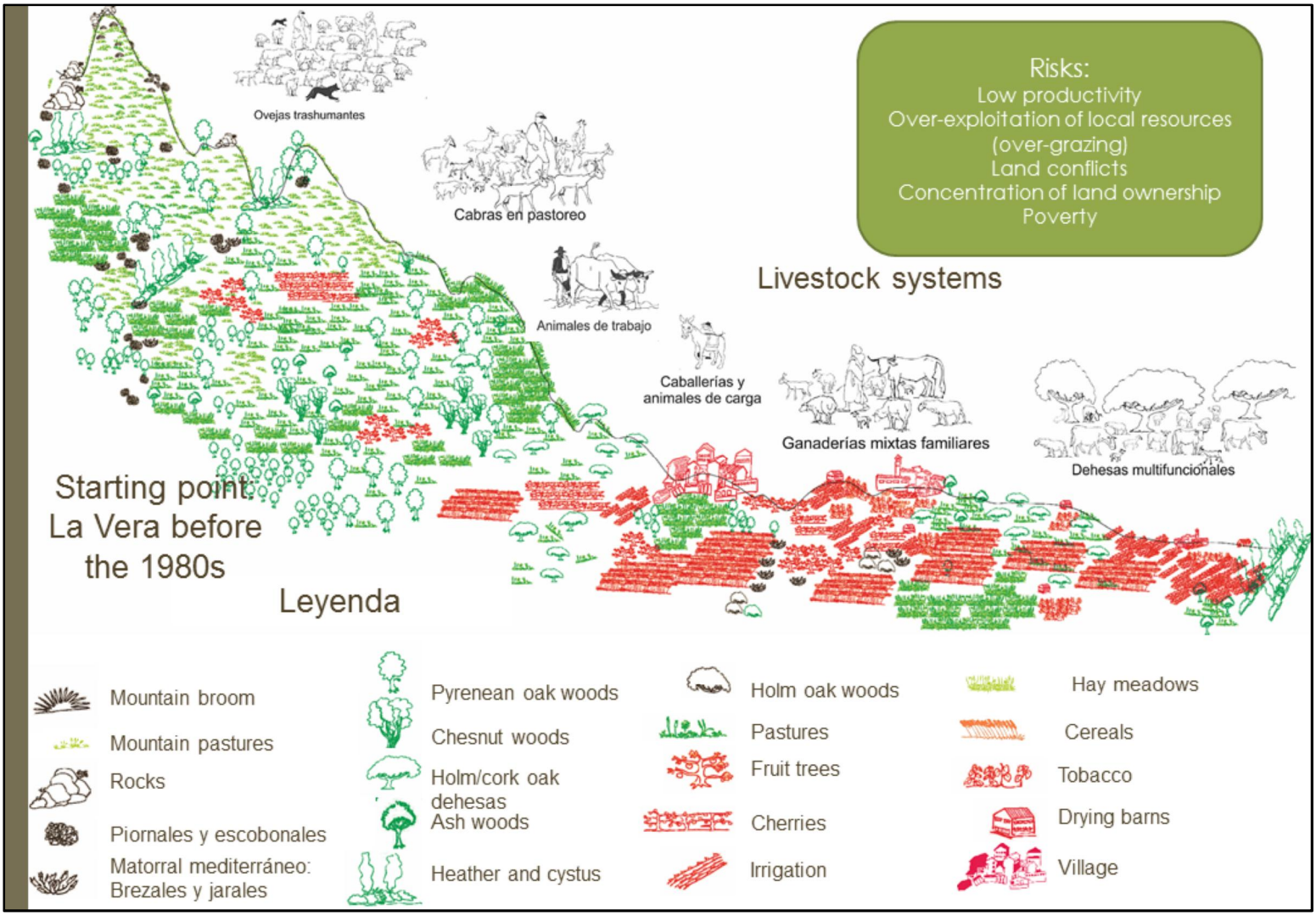
- Management plans for Montes Públicos, critical planning instruments that include forestry and pasture management, but only one of the 31 montes has a plan and, although very detailed, it does not give clear objectives for pastures and grazing in the monte in question.

- Grazing plans for Montes Públicos (pliegos de pastos), these are very basic documents that set out the grazing resource in each municipality, the numbers of stock that can use them and the amount farmers must pay, while defining certain conditions (such as not damaging forest regeneration). Most are "cut and pasted" from

previous years and do not reflect actual conditions.



Time-line
Follow the dotted line from top-left.
Photos from on-line sources.



The starting point in the late 1970s

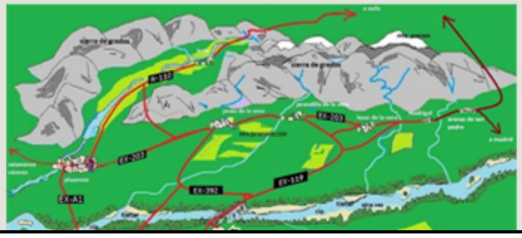
The transect illustrates the situation in the late 1970s and early 1980s. Compared with today, very large areas of grassland, scrub and forest are under grazing use, or cut for hay and other forms of forage. The range of livestock types is more diverse. Forests are mainly limited to the steeper slopes, and are exploited for firewood, forage and livestock bedding, as well as goat browsing. Dung is transferred to crops and subsistence vegetable growing. In the river valley, there are already large expanses of irrigated land. The municipal dehesas have mixed livestock and are used for grazing, pannage, firewood and charcoal, as well as some cropping.

In places there was undoubtedly excessive livestock pressure; for example, riverine woodlands were almost non-existent due to the practice of herding goats along river margins especially in the summer.

Before the 1980s: Territory and society

Until the 1970s, over half the population of La Vera was illiterate. In the 1970s, the children of farm labourers and goat herders began to go to school, but rarely reached the end of their legally-required minimum education (12 years old); absenteeism was widespread, and even young children would join the family workforce on the land as soon as possible.

Hard living and working conditions for share-croppers and goat farming families



The natural limits of the district, with the mountains to the north and river to the south, have led to a compact social and cultural structure.

Territory and society before the 1980s

Society was very rural in character and based on the primary sector. The structure of land ownership produced enormous social differences. The wealthiest estates, in the irrigated river valley, were owned by well-off families who applied a system of *mediería* or share-cropping. Basically this meant that a share-cropper (mediero) and his family would live on the estate and do the farming and pay all the farming costs, in return for half of the production. The landowner made the decisions and kept half of the production for himself. These estates produced tobacco and paprika peppers.

In economic terms, the livestock sector was less significant than the crop sector. However, livestock were everywhere and many families kept a few head of sheep and goats, in particular. These were often kept together in a "village flock", and the shepherding was shared on a rota system. Goat farmers (or rather goat-farming families, as all members were involved) were the most common livestock farmers, and their place on the social scale was very near the bottom, similar to that of the medieros. Many goat farmers were illiterate and children often did not go to school. These families usually lived in the uplands in very hard conditions.

Map source: Jaramanda.com. Photos: from on-line sources

Crop farming before the 1980s

In the mid-20th century, the building of Rosarito reservoir on the Tiétar river led to the development of modern irrigated cropping on the floodplain, mainly for tobacco and paprika peppers, which became the economically dominant activities in La Vera from this time.

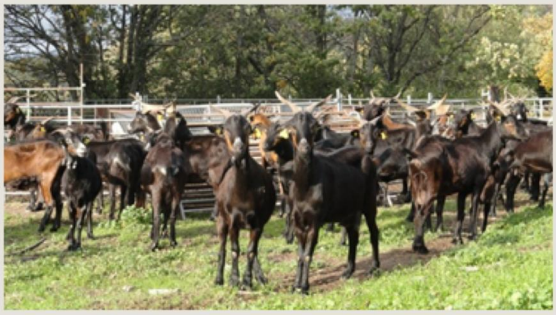
The foothills were covered with olive groves, farmed by hand and with animal traction, although from the 1970s the falling olive price led to some clearances of olives, in some cases to plant tobacco on the hillside terraces. The old oil mills began to close down.
Orchards (olives, figs, chestnuts) and vegetable gardens were mainly a family activity, but from the late 1970s the commercial cultivation of new crops began in La Vera (raspberries, kiwis and especially in the western municipalities an increasing area of cherry trees).

Tobacco was the main economic force in this period, being controlled by the State and protected from foreign competition, and subsequently massively subsidized by the CAP (from 1986). Production was all purchased by the State company at fixed prices, and quotas were allocated to producers.

Paprika peppers has been a traditional crop in the area for hundreds of years, and was one of the main exports from La Vera, as well as being a key ingredient in local preserved meat products and cooking.

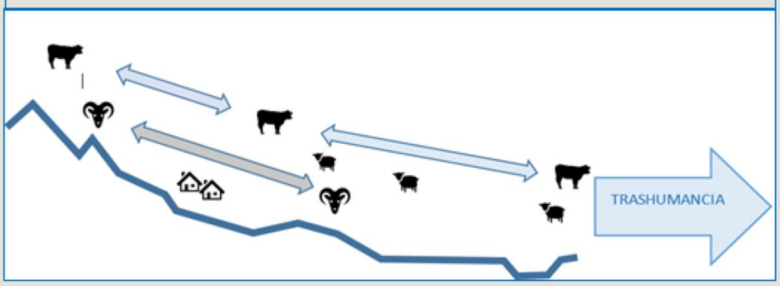
Photos: author and on-line sources

Before the 1980s: livestock farming



The local goat breed is the Verata, a dark Brown-black animal that is very Hardy and well-adapted to the mountain conditions and to a variety of semi-natural forage.

There have always been seasonal livestock movements in La Vera. These include local transterminance, covering distances of one or two days from lower altitude dehesas up to the mountain pastures; and longer distance transhumance from dehesas and other permanent pastures in Caceres province or Toledo, typically cattle and sheep.



Dairy cattle largely disappeared from the late 1970s, and had only existed to supply local demand in combination with the traditional goats' milk. Beef cattle are mostly of the negra ibérica breed, also known as avileña negra.

Livestock

Before the 1980s, all livestock were in family farms and feed was almost entirely from semi-natural forage. Dairy cattle were kept near to the villages, and there were very large numbers of sheep and goats on the pastures and in woodlands.

Goats were generally kept at mid-high altitudes (above 1,000m) and the farming families lived there in very rudimentary conditions, with no electricity or running water. Cheese was made at the farm in the mountains, and transported to the village for sale by mule or donkey, constituting a crucial cash income for the goat farming family. Cattle farmers were generally based in the villages, moving their animals to different pastures according to the season.

Seasonal movements take different forms. Many families move from the foothills to the uplands in the summer months with all of their livestock, including chickens and pigs. There are also longer distance movements (transhumance) of large flocks of sheep and herds of beef cattle.

Photo sources: author and on-line

Before the 1980s: landscape and biodiversity

Oak woodlands were more open and with no understoey, due to heavy grazing pressure and use of foliage as forage and prunings and trees for firewood.

The mountain rivers are an essential and defining characteristic of the landscape of La Vera. Before the 1980s, riverine vegetation was heavily grazed by livestock, epsecially goats and sheep. Riverine woodlands of alder and ash have recovered in recent decades.

Local people talk of a countryside very rich in wildlife, more so than in the present day, despite the relatively intensive exploitation of resources. This is probably due to the high diversity of largely semi-natural habitats, as well as the range of altitudes.

Photo source: Author's own

1980-1995: PERIOD OF POLITICAL AND SOCIAL TRANSITION

Fotografías procedentes de fuentes online

1980-95: new developments in crops…

The turkish style tobacco varieties (*Burley*), begins to be replaced by *Virginia*, requiring drying in gas ovens rather than the old air-drying system. This leads to a massive reconversion of the sector and investment in new drying machinery. Cultivation and harvesting also begin to be mechanised. Immigrant labour especially from the maghreb is increasingly a characteristic. State controlled prices are replaced by CAP support.

Cherry cropping expands considerably, especially in the western uplands of the district, coming within the PDO for Cherries from Valle del Jerte. Oak woodlands are cleared for cherry plantations. Polytunnels, mainly for raspberries, expand with CAP funds channelled through the cooperatives. Cherries and raspberries become important export crops.

The PDO for Paprika of La Vera is established in 1991

Tobacco becomes an increasingly dominant sector economically. In 1987, following EEC accession, a new State company CETARSA is established to manage the buying and processing of the product. Faced with uncertainty and fearing liberalization, many tobacco landowners sell their land, often to the share-croppers, who suddenly become independent farmers in receipt of massive CAP subsidies, and with considerable influence on the regional government's approach to the CAP (on-going and successful defense of the tobacco subsidy in the face of pressure from Brussels).

Photos: from on-line sources.

Less development for Livestock

While crop farming is undergoing major development and investment, with accompanying social change, livestock farming is largely stuck in the past, with the traditional labour demands of shepherding and hand-milking. But the traditional making and selling of cheese is rapidly wiped out, or driven underground, by rigidly applied EEC food hygiene rules. This removes a key source of income and forces farmers to sell their milk, with major problems for transport and collection in the mountains

Although the share-cropping system passes into history in this period, allowing tobacco-growers to increase in social stature, the goat Farmer continues to be seen as at the bottom, of the social order in La Vera. Cattle farmers have more social and economic stature, and usually control the rights to pastures, sub-letting them to goat farmers.

1980-95: Landscape and biodiversity

As grazing pressure declines, oak forest and scrub begin to colonise areas of previously open pasture.
At the same time, many existing parcels of mature oak woodland are cleared for the establishment of fruit plantions or polytunnels.

Hay meadows are widely abandoned or changed to other uses, as are the more traditional orchards of figs and olives.

Rural tourism begins to develop.

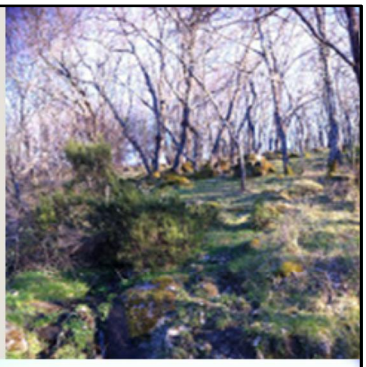
As grazing pressure declines, oak forest and scrub begin to colonise areas of previously open pasture. At the same time, many existing parcels of mature oak woodland are cleared for the establishment of fruit planations or polytunnels. Environmental protection legislation is introduced to control changes of land-use, such as establishment of new fruit plantations at the expense of natural vegetation. The controls cause bad feeling from local population, and are not always respected.

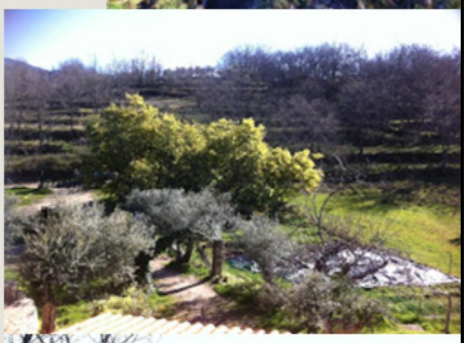
Rural tourism begins to develop, mainly focused on the mountain rivers. There is no real agri-tourism and only limited development of walking trails. The landscape is a backdrop for tourism, but the two things are not integrated.

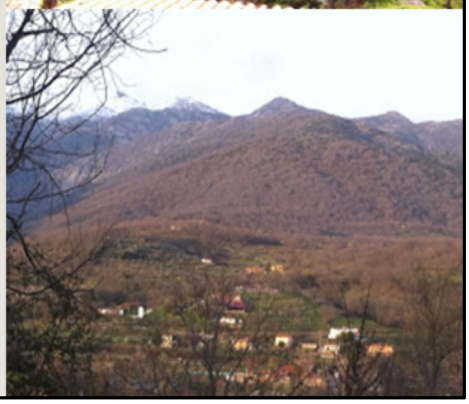
Hay meadows are widely abandoned or changed to other uses, as are the more traditional orchards of figs and olives. Herbicide rapidly becomes the standard way to remove herbaceous cover in orchards, thus reducing biodiversity and soil protection.

The higher moutains experience rapid colonisation with broom and cystus as livestock numbers decline. Hunting of Spanish Ibex and other large fauna becomes an increaingly important land use at higher altitudes.

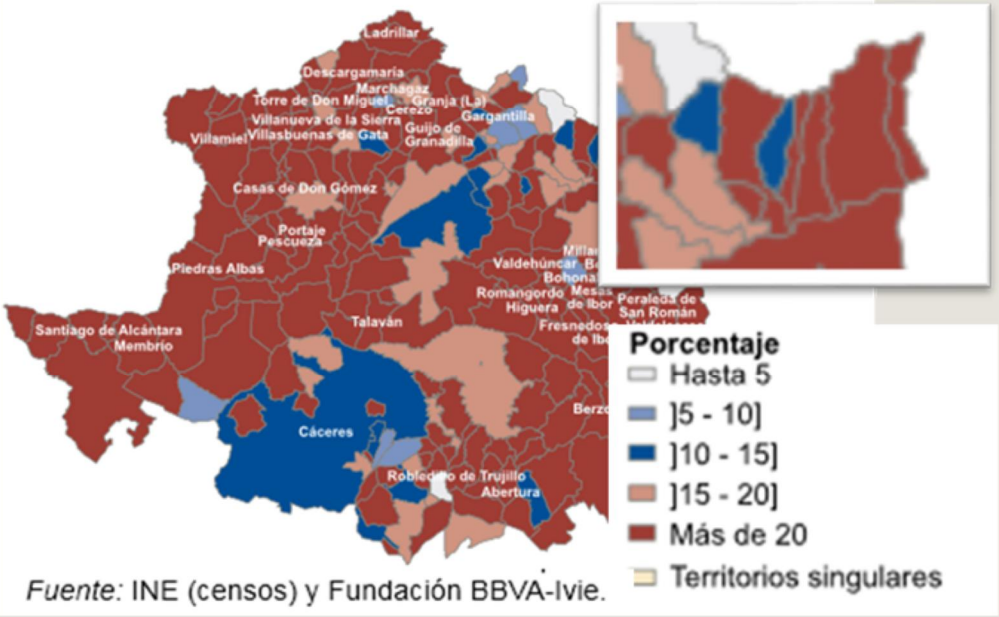
1995 to the present





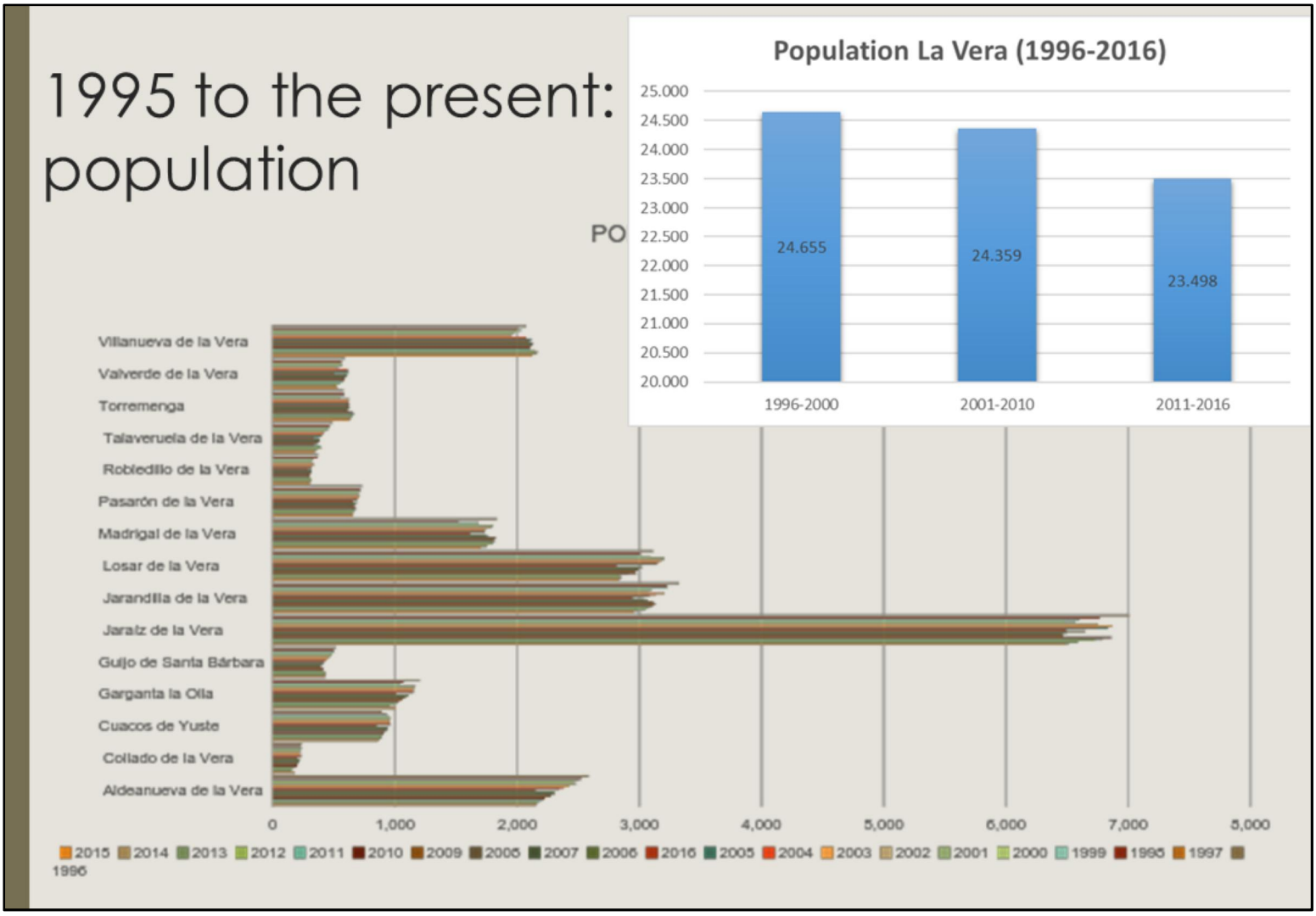


Map showing the rate of illiterate people in the late eigthies



Fuente: INE (censos) y Fundación BBVA-Ivie.

Photo source: Author's own
Map source: BBVA-Ivie



Social change

The influx of newcomers that started as a minor phenomenon in the 1980s, increases in this period. The relative accessibility of plots of land for house building (with or without a licence) and the attractive landscape and climate attract incomers of all ages from different parts of Spain and abroad. More recently, there has been a wave of young "neorural" people often with an agro-ecological agenda, experimenting with the creation of a new rural economy.

At the same time, some emigrants from La Vera return to their native village, while many young people leave the district in search of higher education and employment elsewhere in Spain and the wider world.

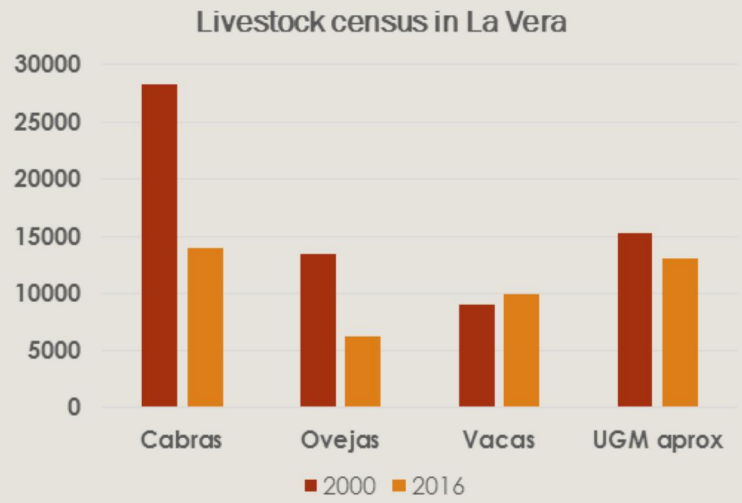
Overall, society in La Vera has changed from a very traditional, class-ridden and inward-looking society to a relatively modern, diverse and culturally rich society with global connections.

Graph. Based on data from INE

1995 to the present: Livestock

In the past 16 years, goat numbers in La Vera have fallen by 14,000 and sheep by 7,000.

Livestock holdings have declined by 30%



Since the turn of the century, the decline of sheep and goats seems to have accelerated. Although goat grazing continues on a smaller scale, there is a continued tendency towards semi-indoor systems in the foothills near to the towns. Mid-altitude grazings are abandoned in many areas, as stock numbers are insufficient to use the entire forage resource.

Cattle numbers have increased slightly, reflecting the better economic situation, higher CAP support and lower labour requirements of beef cattle. The traditional system of winter grazing in the dehesas and summer grazing at high altitudes is maintained by most cattle farmers.

Traditional infrastructure, such as tracks, watering points and huts, has partly disappeared. Goat farmers still have quite rudimentary facilities. Although in some cases considerably improved since the 1980s, with new sheds for example, around half of farmers still rely on hand milking, which is very time-consuming.
The great majority of goat farmers are over 50, many are older, and successors are extremely rare. The normal pattern when a Farmer retires is that the Flock is sold outside the district.

The role of the CAP from 1986

The CAP begins to be implemented in Spain from 1986. It is characterised by high levels of price support for tobacco in particular, and far less support for sheep and goats.

Traditional tree crops such as olives and figs are supported to some extent by minimum prices that help to provide an incentive for continued production.

Newly developing crops in La Vera such as cherries and raspberries have very little Pillar 1 CAP support, but funding is received by the powerful cooperatives from structural funds and later from Pillar 2, including grants for investments by members in new plantations and polytunnels.

CAP in transition – changing instruments but the same imbalances

As the CAP transitions away from price support towards area payments for crops and headage payments for livestock, the historic imbalances are maintained.

Tobacco growing is rewarded with an enormous payment that reaches as much as 10,000 euros per hectare, for producers that hold historic quotas.

Figs lose their minimum floor price and these traditional orchards are increasingly abandoned as prices drop below the point of economic viability.

Olives lose the tree payment for small producers, and the transition to decoupled payments rewards producers who had high yields in the 3 reference years.

Sheep and goats find themselves with a headage payment far smaller per LU than that received by beef cattle producers.

The "new" CAP from 2014 – things get even worse or pastoral farming

New eligibility rules for permanent pastures lead to the exclusion from all CAP support of very large areas of grazed habitats (see next slide).

Headage payments for goats/sheep are around 7/8 euros, compared with 15/20 euros in France and Bulgaria, as a result of national decisions.

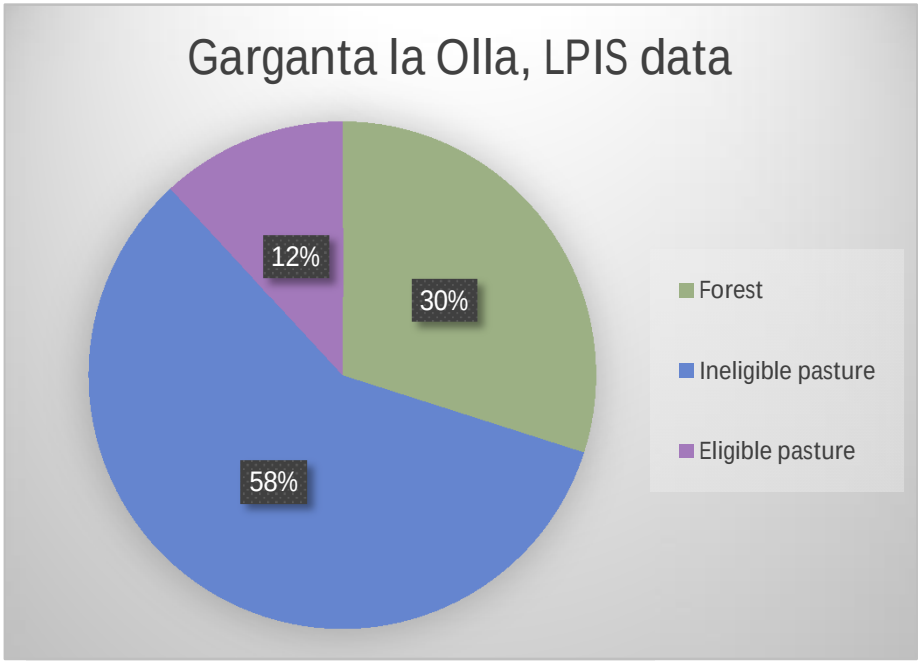
Under a new system of "regionalised" Pillar 1 payments, the irrigated arable land of Jaraíz de La Vera (tobacco land) has the highest payment per hectare in Spain (1,430 euros). In nearby Toledo, similar irrigated land has a payment of 274 euros. Permanent pasture, if it is eligible, gets around 50 euros.

Agri-environment scheme for tobacco (integrated production) has a payment of 800 euros per ha. For extensive livestock the agri-environment scheme pays 119 euros per ha, but most of the grazing land in La Vera is excluded from agri-environment by the Pillar 1 eligibility rules, also applied to Pillar 2 in Spain.

Vast areas of permanent pasture have been made ineligible for the CAP (including agri-environment) under the post-2014 policy.

In one municipality (Garganta la Olla) only 12% of the total pasture and forest area is eligible.

Pasture and forest are both used for grazing, although there is no accurate record of the actual use of each parcel.



Food hygiene rules and the decline in traditional cheese-making

From 1986:

- Spain joins the European Community and begins to implement strict food hygiene rules
- Traditional on-farm cheese-making in the mountains is outlawed
- Abandonment of milking in the mountains is driven by:
  - Lack of access for daily transport of milk
  - Lack of electricity for cooling milk and pasteurising milk from flocks with brucelosis
  - Prohibition on traditional methods for managing temperatures in dairies

Rigid application of food hygiene rules has been one of the main drivers of the decline of the extensive HNV grazing system in La Vera, as producers lost a crucial cash income from making cheese and thus adding value to their milk. An alternative strategy could have been to adapt the rules to the circumstances of small-scale artisan systems, while investing EU funds in an appropriate modernisation programme for these systems, rather than full-scale industrialisation of cheese making.

An attempt to establish micro cheese dairies in conjunction with the main co-operative (Coolosar) fell foul of the hygiene rules, and they had to close.

Thus in a few years (late 1980s to 1990s) the system went from one in which practically all goat farmers made and sold their own cheese, to one in which there is no licensed on-farm cheese making, and the great majority of milk is sold to the co-operative or other buyers outside the district.

Food hygiene rules and the decline in traditional cheese-making

- 1990s:
  - The co-operative Coolosar establishes micro cheese dairies in the mountains for making cheese (Kikla Brand) to be matured at the co-operative.
  - As these micro-dairies are forced to close, Coolosar sets up its own centralised cheese dairy in 2000
  - No more than 10 cheese dairies in the whole district of La Vera
- 2004:
  - Closure of last *mountain* cheese dairy in La Vera (all remaining La Vera dairies are in the foothills)

Present day situation of cheese making

- Semi-industrial cheese dairies: 3 of which 1 is Coolosar
- Coolosar has 20 livestock members supplying milk and buys milk from a further 20 farmers approx. (there are 350 livestock holdings in La Vera, probably no more tan half of them have goats):
  - *In 2000: 2m litres per year*
  - *In 2017: 1m litres per year (massive decline from 2009)*
- Farmhouse cheese dairies: 0 (but several exist without licence)
- Farmhouse cheese dairies in similar regions (la Vera 883 km^2/14000 goats):
  - *La Palma (Canarias): 888 km^2/7000 goats = 79 dairies*
  - *Valle del Vesubio (France): 393 km^2 = 13 dairies*
- Plans for new cheese dairies:
  - *HNV LINK has identified 8 projects (probably more to come)*
  - *They will only be possible with flexibility from authorities in the interpretation of food hygiene rules; and training and advice on developing this sort of project (very innovative for this region)*

Decline of local slaughterhouses and goat meat

- Slaughterhouses :
  - 1995: 8 municipal and 1 private
  - 2000: 2 municipal and 1 private
  - 2017: 1 private (in Jarandilla)
  - Most farmers use public slaugtherhouses out of the disctrict
- Local goat meat is not strongly promoted in local shops and restaurants
- Absence of initiatives to promote and differentiate La Vera goat meat from pastoral systems, from other more intensively farmed meat

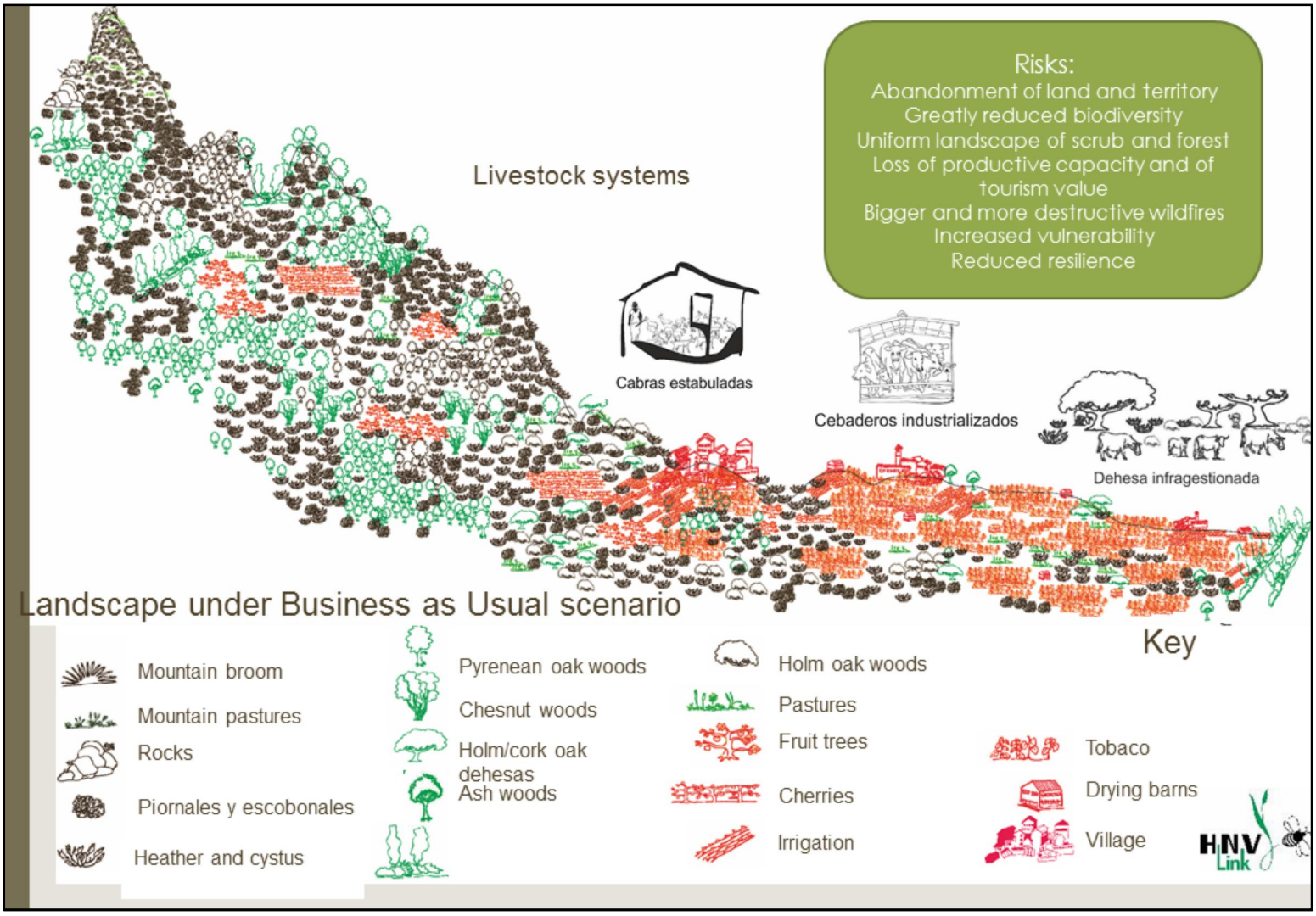
Scrub encroachment and homogenisation of the landscape continue as grazing is reduced. In some municipalities there are now very large areas of dense, impenetrable oak regrowth of about 10-15 years old. In the Eastern parts, juniper formations have recovered and expanded as grazing declines.

Tourist pressure on the mountain rivers (several of which are designated SAC) has become extreme in places. Water extraction for irrigation of fruit crops also has considerable impacts on these rivers and their tributaries.

Much of the traditional mosaic of orchards has been lost and replaced by expanding oak forest and more intensive fruit cropping. Traditional orchards that remain have lost much of their biodiversity as a result of intensive use of herbicides to eliminate the understorey.

The intricate network of stonewalls and terraces that characterises the foothills is gradually becoming degraded as walls collapse and often are left, allowing the terrace to gradually erode. The government has not implemented agri-environment measures for restoring these landscape features.

Photo source: Author's own



Business as Usual landscape

BAU – what people think

We interviewed farmers, mayors, foresters, environmentalists, local development agents and others to find out how people view the current state of pastoralism and the expected BAU scenario

Conservation of the pastoral landscape

Livestock farming is essential for the conservation of the SAC, but farmers do not know what Natura 2000 is because nobody has ever bothered to tell them or ask their opinion about it:

"Conservation is all well and good, but the ones whose job it is are actually destroying the landsape – they make life impossible for pastoralists at every turn"

"Conservation – what does that mean? Stopping everyone from doing anything, so everything is abandoned?"

Goatherds started to disappear about 30 years ago, and there's no sign of the trend stopping:

"30 years ago in Losar de la Vera there were more tan 20 goatherds and 25,000 goats using the upland grazings of the municipality. There's only one left, and he has no successor"

There's a widespread perception of a direct link between abandonment of goat grazing, consequent scrub-encroachment, and fire: *"where the fire happened, there was a lot of dense scrub; you could tell there had been no goats there for a while"*.

Barriers and difficulties

Goat farmers are generally quite old, very individualistic, and not valued by society:

"why do you bother coming to school, if you're just going to herd goats with your father?"

Animal health rules and the government campaign to eradicate bovine TB in goats: the biggest current challenge (the sector is in crisis):

"they're slaughtering goats on suspicion they have TB, but instead of the 200 euros it cost you to breed and raise the goat, they give you 30 euros … if they slaughter 150 animals, you're finished"

Environmental rules are seen as working against graziers:
They stop us from controlling juniper scrub because it's a protected species, but it takes over our pastures and makes them ineligible for CAP payments

Pastoralism – relations with other sectors and the authorities

Hunting: Large estates in the mountains are owned by rich absentee landlords who manage them purely for hunting, a sector that seems well cared for by the regional government, promoted as a motor for rural development, but often in conflict with goat farmers for use of common grazing land.

"For some reason the hunters don't want goats on "their" land. They're ok with cows, but they don't want us goatherds"

Bureaucracy appears to be not joined-up, and farmers pay the consequences
"To do anything you face a mass of paperwork and rules that don't make any practical sense. I was approved a grant of 42,000 euros for a new shed for the goats, but the village council took over a year to give me the building licence, which meant I missed the deadline for claiming the grant – there's no flexibility"

The whole set of policies seems stacked against traditional pastoralists
"the forage our goats have always used is a mix of shrubs, acorns, leaves, bram browsers primarily. If they exclude all this land from the CAP it'll become worthle abandoned, then fires will come"

Valorising livestock products

Products from the HNV system aren't valued in the market, not even locally:

"a kid goat is worth almost nothing nowadays, it makes more sense to give them to the dogs as soon as they're born, than to have the expense of feeding them and then giving them away for not much more than 3€ per kilo".

There are no artisan, on-farm cheese dairies in La Vera, despite the enormous tradition of local cheese making. The rules and bureaucracy make it almost impossible:

"yes, I'd really like to start a small cheese dairy, but I'm afraid of all the food hygiene rules, and can't afford to build a factory like they want; and now with the TB eradication programme, nobody can take the risk of making a big investment, you could lose your entire flock at any minute"

Legal frameworks impacting on pastoral landscape

Many policy and administrative areas impact directly on the pastoral landscape, but there is no shared vision or strategy for either present or future use or management. Overall, the policy package seems weighted against the HNV system.

From the perspective of the HNV Farmer, especially the traditional goat grazing system, the whole package of policies appears to be weighted against him/her, almost as though they are designed to destroy the farming system and the farmer's livelihood:

- Implementation of CAP Pillar 1 discriminates against HNV pastures with a mosaic of grass, shrubs and trees, and also against goats and sheep.
- Pillar 2 measures are not used to support HNV livestock systems.
- Ill-conceived animal health campaigns to eradicate Tuberculosis are decimating herds and the farm economy, with no hope of achieving objectives.
- The regional government seems to give more priority to the hunting economy than to HNV grazing systems. TB in wild fauna is not controlled, making extensive grazing in proximity to wild fauna a constant animal health hazard.
- Implementation of food hygiene rules is done in a way that prevents innovative small-scale processing of HNV products.
- Natura 2000 is implemented in a top-down and rigid manner, with no involvement of the actual users and managers of the land, and no positive measures to support or guide their activities.
- Forest policy has an ambiguous approach to livestock: it has supported grazing in the past through investments in infrastructure and scrub-clearance, but the new CAP does not allow investments on permanent pastures from the forest authority.

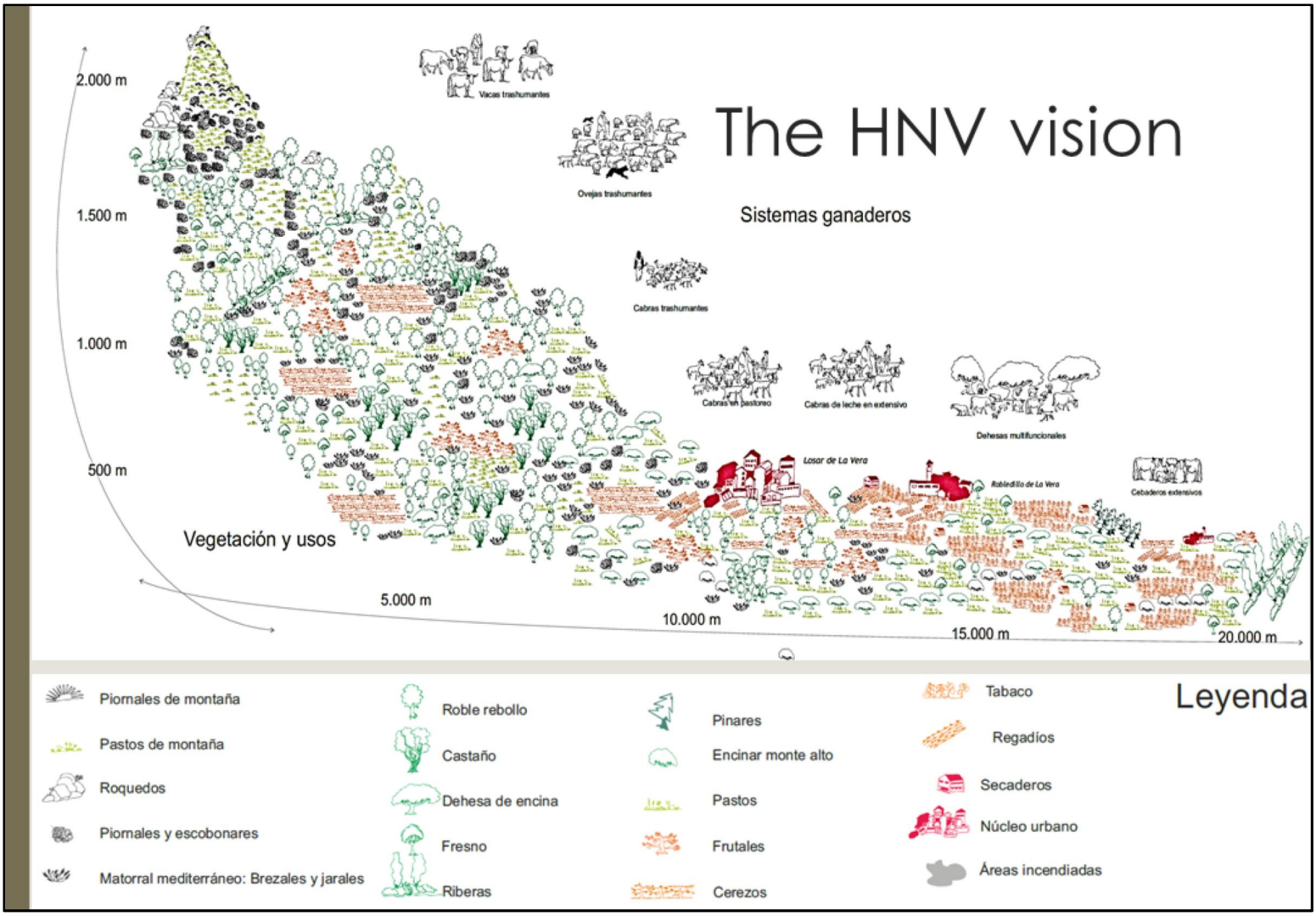
Resulting consequences on farm economy

- **Suckler cow numbers** are increasing gradually, as the labour costs are relatively low and CAP coupled payment provides an additional incentive. They continue to be kept in the traditional extensive grazing system, but there is also a tendency to develop indoor finishing units.
- **Goat grazing** is expected to continue to decline, due to high labour costs of grazing and now the added high risk of TB contagion from wild fauna. The shift to semi-intensive indoor systems will probably continue.
- **TB eradication campaign** adds the considerable complication of movement restrictions on flocks/herds identified as possible carriers; this may create problems for local transhumance practices.
- Overall, **cow grazing** may be maintained, with some loss of seasonal movements, while goat grazing continues to decline. This scenario will lead to on-going decline in pasture quality (scrub encroachment) as goats play a crucial role in browsing woody vegetation and controlling its spread, whereas cows alone will not prevent encroachment.

The field work shows a very tight economy for goat breeders. The prices of milk are a little more stable, but they are too short. The price of the meat is under production costs. There are no incentive to keep grazing as main source of fodder.
Cattle farmers are a little better rigth now in economic terms. Despite the meat prices being low there are some exports that are balancing the figures. Anyway, they rely on intensive fattening for finishing the pieces which is good as preserving grazing for reproductive cattle, while harming the HNV by intensification. There is a need for further analysis that we are currently performing.
Cattle farming is a key HNV system, though it is less threatened than pastoralist goat farming. The rogh situation of the extensive goat sector has biased our analysis toward this system, tough our efforts are increasing significantly on the extensive cattle.

Resulting consequences on land-use and biodiversity

- Increasing homogeneity of landscape, with large areas of dense scrub and forest (dominated by oak) interspersed with intensively managed tree crops.
- Widespread loss of semi-natural habitats, including Annex 1 habitats.
- Landscape becomes less open, less valuable for mosaic-loving species (butterflies, birds) and less accesible for tourism.
- Fires become larger and more damaging.



Grazing systems

The number of goats is back to its level of 15 years ago (double the current number).
There are young people working as shepherds and running extensive livestock farms.
There is a shepherding school in the district.
The livestock density in the dehesas is better adapted and more sustainable.
Upland pastures are in healthy condition, free from scrub encroachment and in active use under a variety of systems, and farmers are content with grazing conditions.
The network of drovers' roads is kept in good condition and is in active use by graziers.
There are good infrastructures for livestock, including access, corrals and sheds, in all areas of pasture including in the mountains.

Products and markets

Products from extensive livestock systems are for sale on the farm, and available to local people and tourists, as occurs in other parts of the EU (e.g. France).
Artisan practices are combined with new technology to the benefit of producers, local people and the public good.
There is a commercially successful network or association of livestock producers in La Vera with their own label that promotes the products of extensive grazing systems.
In La Vera there is increased consumption of local livestock products, including in restaurants, with the specific farm identified on the label, menu, etc.
Consumers are able to distinguish livestock products of local grazing systems from those produced under intensive systems.
Tourists come to La Vera in search of local products from traditional livestock systems, and find them readily available and clearly identified.

Biodiversity-rich landscapes: how will they function in 2030?

Workshop results are:

- Diversified extensive livestock systems
- Integration between livestock, land planning and Natura 2000 management
- Recognition of local production, also in tourism facilities and local markets
- Multifunctionality
- Collaboration between environmental and agricultural administrations and producers
- Improved social fabric among producers and other stakeholders

Landscape and habitat management

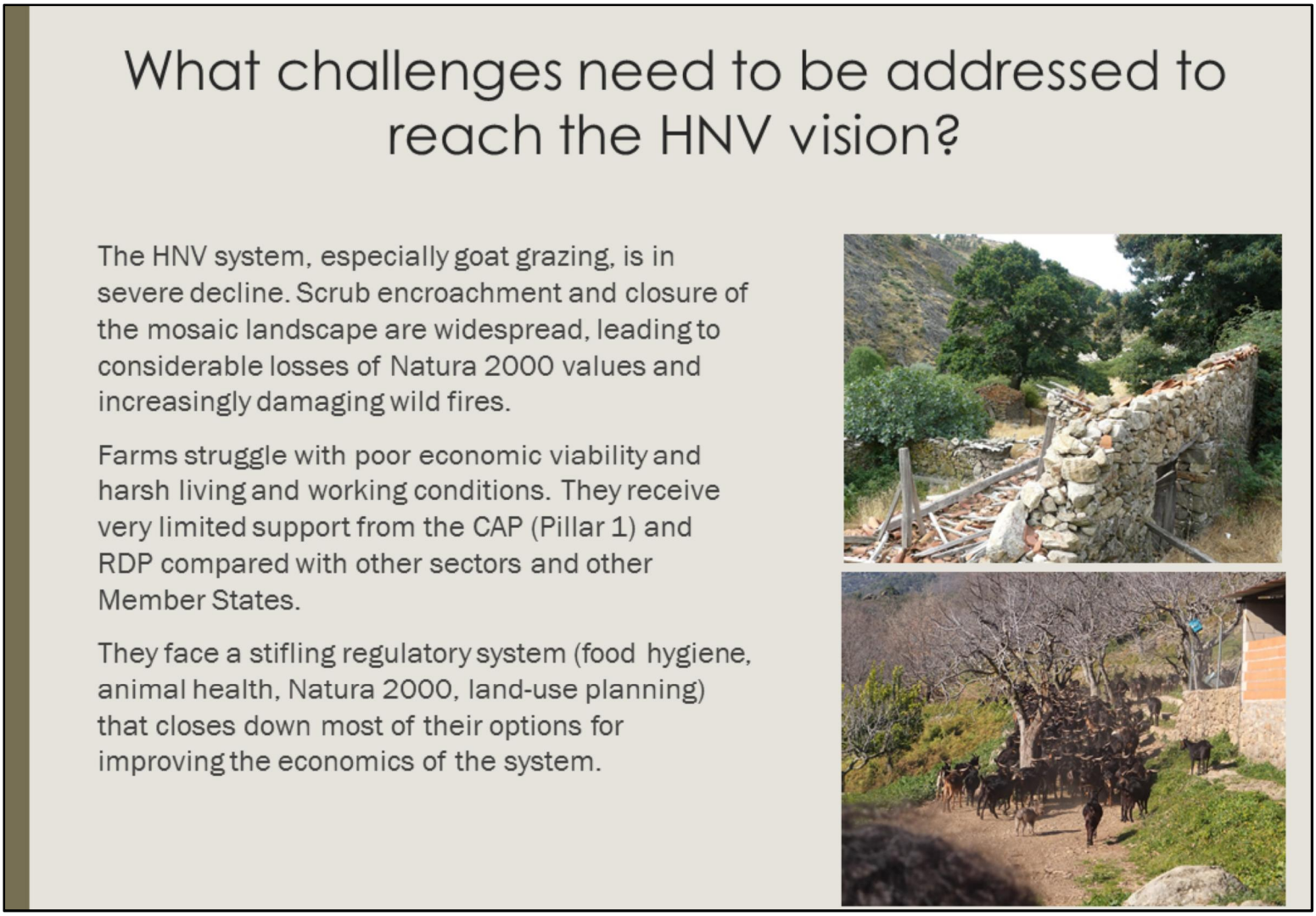
Vegetation is controlled by planned grazing systems at a landscape scale.
The process of scrub encroachment of pastures is halted and reversed.
The dehesas are undergoing regeneration of tree cover.
The most threatened pastoral habitats (e.g. hay meadows) have targeted measures to incentivise their long-term maintenance.
Oak woods have progressed towards high forest and are maintained through a mix of silvicultural management and grazing.
The incidence of wild fires is greatly reduced.
Wood and timber are exploited in a way that is compatible with livestock use of the forage resource.
Multiple uses combine to sustain a balanced exploitation of “montes”, including resin, wood and timber, livestock products, honey, mushrooms, hunting, etc.
Biomass is exploited for alternative uses, such as energy.
Native pine woods are extended in the river valley area.
Local people and tourists are more informed and educated about environmental conservation and the role of pastoral systems in maintaining the landscape of La Vera.

CAP

The CAP is implemented in a form that gives priority to public goods, such as landscape conservation and fire prevention. In terms of eligibility for CAP support payments, pastures with scrub and/or trees are not penalised compared with grass pastures, if there is evidence of a sustained grazing activity. A specific agri-environment measure is available to support balanced grazing under extensive livestock systems, and the majority of extensive grazing farms in La Vera are participating in the scheme. RDP measures are available to finance improvements for all pastures and their infrastructure, in an approach adapted to nature conservation objectives. A project is financed through the RDP (Operational Group, LAG, or another measure) through which farmers are supported by a dedicated "animateur" to work for the improvement of the situation of grazing and extensive production in La Vera.

Rules, regulations and official plans

Bureaucracy is simplified, integrated, accessible and flexible. Animal health controls are operated on a rational basis, taking account of wild fauna vectors and of the farmer's situation (extensive grazing with seasonal movements on common grazings). Small-scale processing and sale of products from extensive grazing systems are supported financially (e.g. by LAG) and their development is facilitated by an adapted and integrated implementation of all relevant rules and regulations (food hygiene, land-use planning, environment, tax system, etc.). Producers and government officials are all fully informed about the application of food hygiene rules to small-scale and on-farm processing systems, and about how to interpret the adaptability required under EU regulations. Legal steps to follow for direct sales of meat from the producer are clear and well known by producers and government officials.There is an official strategic plan for the conservation of pastoral habitats and fire prevention, developed and implemented with full farmer participation and with the buy-in of all government departments and agencies (including LAG).The SAC Sierra de Gredos has a management plan with quantified objectives for habitat and species conservation, with concrete measures and budgets assigned to each objective, rather than the current wish-list with no measures. Criteria for approving change-of-use applications correspond to the public good, not to private interests. There is accurate, transparent and easily accessible official information about pasture and habitat plans and objectives in the district.



Main challenges to HNV livestock farming in La Vera

The HNV system in La Vera, especially goat grazing, is in severe decline (50% loss of goats and sheep in the past 15 years). Scrub encroachment and closure of the mosaic landscape are widespread, leading to considerable losses of Natura 2000 values and increasingly damaging wild fires.

Farms struggle with poor economic viability and harsh living and working conditions. They receive very limited support from the CAP (Pillar 1) and RDP compared with similar systems in other Member States and with other sectors in Spain. They face a stifling regulatory system (food hygiene, animal health, Natura 2000, land-use planning) that closes down most of their options for improving the economics of the system.

Pastures are mostly in shared use (public and private) and are in very poor condition and suffer competition from hunting use. Only one pastoral unit has a management plan. Moving to indoor feeding systems is the obvious alternative to the challenges of extensive grazing on unfenced pastures.

On-farm processing and direct sales cannot develop due to rigid rules and bureaucracy. Milk is sold mostly to bulk buyers at low and highly unstable prices. There is a lack of product differentiation for cheeses and goat meat from grazing systems, compared with intensive indoor feeding.

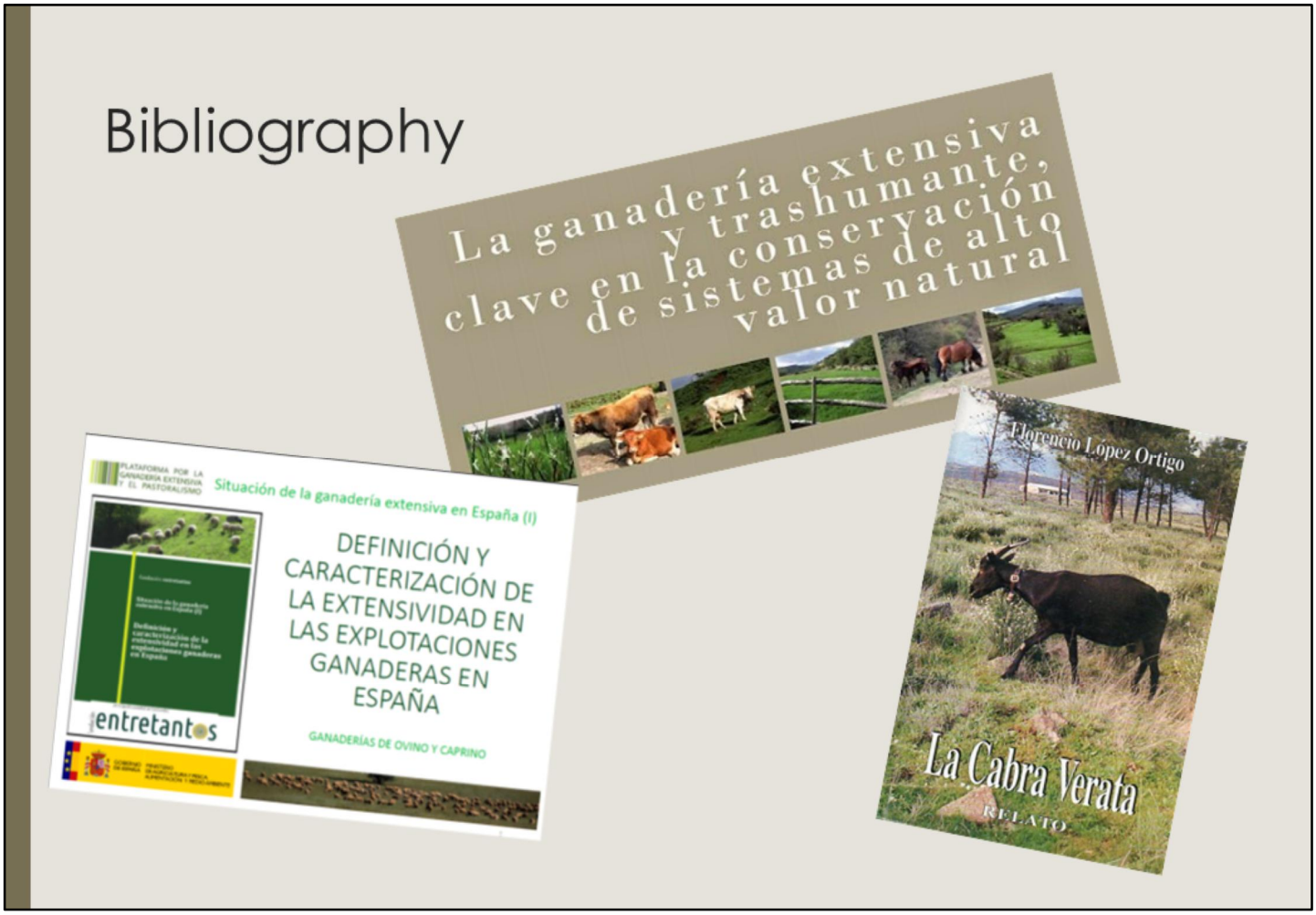
Currently, goat farms are suffering the effects of a very severe, top-down campaign by the regional authorities to eradicate TB. Thousands of goats are being slaughtered, but the test being used has a high incidence of false positives, and TB is carried by increasing populations of wild boar and deer, for which there is no TB eradication programme.

Regional government policy has no vision for the future of upland grazing systems, rather there is a fragmented and dysfunctional set of parallel policies for agriculture, forests, hunting, animal health and nature conservation that between them are driving the HNV system into terminal decline.

Who are the actors to get involved in the process? How?

- Regional government (many different departments)
- Local farmers' association and individual goat farmers
- Adicover (LAG)
- Other regional actors (NGOs, university...) in Extremadura
- Synergies with other projects in Extremadura, e.g. Mosaico project
- National Platform for Extensive Livestock and Pastoralism
- Political parties who sympathise with the HNV farming cause

We propose to build alliances on a selection of priority proposals, and to develop a dialogue with key implementing actors (regional government, LAG) to promote these proposals.



ADICOVER (2016) **Estrategia de desarollo local participativo de la comarca de La Vera (2014-2020)**, ADICOVER

Aguilar, A., Cruz, J., Flores, J. C., Nieuwenhuyse, A., & Pezo, D. (2010). **¿Cómo trabajar con las familias ganaderas y las organizaciones de investigación y desarrollo para lograr una ganadería más sostenible y productiva?** Catie. Costa Rica

Amor, A., Ladero, M., & Valle, C. J. (1993). **Flora y vegetación vascular de la Comarca Sierra De Tormantos (Cáceres)** Stvdia Botánica 11: 11-207, 1993

Barrantes, O., Ferrer, C., Reiné, R., & Broca, A. (2009). **Categorization of grazing systems to aid the development of land use policy in Aragon**, Spain. Grass and Forage Science, 64(1), 26–41. http://doi.org/10.1111/j.1365-2494.2008.00666.x

Bellido, M., Escribano Sánchez, M., Mesías Díaz, F. J., Rodríguez De Ledesma Vega, A., & Pulido García, F. (2001). **Sistemas Extensivos de Producción Animal / Extensive Systems in Animal Production**. Arch. Zootec, 50, 465–489.

Bote, V., & Aut, C. (n.d.). Plan de acción sobre conservación y desarrollo de los recursos turísticos de la Comarca de la Vera (Cáceres).

Castel, G., Ruiz, M., & Mena, G. (2007). L**a ganadería caprina en España : evolución y perspectivas**, 26–32.

Cepeda A. (2015). **Ecología y cambio cultural en una comunidad del oeste español. Tensiones en torno a los cultivos del tabaco y el pimiento en Jaraíz de La Vera**. Tesis doctoral. Departamento de psicología y antropología. UNEX

Cepeda Hernández, A. (2013). **Pepper and tobacco growers in Jaraíz de la Vera: cultural adaptation and social transformation in a town of the Spanish west**. Etnicex: Revista de Estudios Etnográficos, (5), 169–183. Retrieved from http://aplicacionesbiblioteca.udea.edu.co:2056/servlet/articulo?codigo=4761716&info=resumen&idioma=SPA

Consejería de Agricultura y Desarrollo Rural de la Junta de Extremadura, (2009). **El pastoreo en Extremadura**. Junta de Extremadura.
Cubo María, J. E., Del Moral Vargas, L., Gallar Pérez-Pastor, J. J., Jemes Díaz, V., López García, M., Mondelo Falcón, R., ... Parra Orgaz, P. J. (2014). **Incendios Forestales en España**. Año 2012, 1–92. Área de Defensa contra Incendios Forestales (ADCIF) del Ministerio de Agricultura, Alimentación y Medio Ambiente.
DGCN. MIMAM (2005). Formularios Oficiales Red Natura 2000. **Sierra de Gredos y Valle del Jerte. ES4320038**. Red Natura 2000. (Dir. 92/43 CEE)
Dirección General del Medio Natural. Junta de Extremadura. (2012). **Análisis y Estudio del Paisaje Vegetal y su Dinámica en la Región de Extremadura**. Junta de Extremadura, Consejería de Industria, Energia Y Medio Ambiente, 124.
Escribano, A.J., Gaspar, P., Mesías, F., Escribano, M, Pulido, F (2009). **Evaluación de la sostenibilidad de explotaciones caprinas extremeñas en áreas desfavorecidas como herramienta de apoyo en la conversión hacia explotaciones ecológicas**, (MARM), 1–10.
Fernández Freire, C. (2007). **La utilización de imágenes multiespectrales en la arqueología del paisaje: un ejemplo en la comarca de la Vera Alta (Cáceres)**. VII CIA -S4 Prospección Geofisica Y Teledetección, 539–554.
García Jiménez, D. (2009). **Paisajes agrarios pre y protohistóricos en la comarca de La Vera Alta (Cáceres): un enfoque arqueo-geográfico**. Tesis doctoral. Dpto de Prehistoria. Universidad Complutense de Madrid. ISBN: 978-84-693-1123-3
García, R., Celaya, R., García, U., & Osoro, K. (2012). G**oat grazing, its interactions with other herbivores and biodiversity conservation issues**. Small Ruminant Research, 107(2–3), 49–64. http://doi.org/10.1016/j.smallrumres.2012.03.021
Gaspar, P., Escribano, A. J., Mesías, F. J., Escribano, M., & Pulido, A. F. (2011). **Goat systems of Villuercas-Ibores area in SW Spain: Problems and perspectives of traditional farming systems**. Small Ruminant Research, 97(1–3), 1–11. http://doi.org/10.1016/j.smallrumres.2011.03.001
Gaspar, P., Escribano, M., Mesías, F. J., Ledesma, A. R. de, & Pulido, F. (2008). **Sheep farms in the Spanish rangelands (dehesas): Typologies according to livestock management and economic indicators**. Small Ruminant Research, 74(1–3), 52–63. http://doi.org/10.1016/j.smallrumres.2007.03.013
Gaspar, P., Mesías, F. J., Escribano, M., & Pulido, F. (2009). **Assessing the technical efficiency of extensive livestock farming systems in Extremadura, Spain**. Livestock Science, 121(1), 7–14. http://doi.org/10.1016/j.livsci.2008.05.012
IGME (2009). **Mapa del Patrimonio Minero de Extremadura**, Junta de Extremadura.
Instituto de estadística de Extremadura. (2014). DIRECTORIO CENTRAL DE EMPRESAS (DIRCE) IIEX 2014.
José Ignacio Tabernero Montejo. (2012). **Ganado caprino alimentación**. Consejería de Agricultura y Ganadería. Junta de Castilla y León.
Junta de Extremadura. (2010). **Proyecto de ordenación del monte "Baldío de Torreseca" y Plan Especial 2010-2019**. Junta de Extremadura.
Luque Cuesta, M. (2011). **Caracterización y evaluación de las razas caprinas autóctonas españolas de orientación cárnica**, 1–354. Tesis Doctoral. Universidad de Córdoba.
MAGRAMA. (2013). **Ganado Ovino de Carne Extremadura y Navarra**, Subdirección General de Análisis, Prospectiva y Coordinación. Subsecretaría de Agricultura, Alimentación y Medio Ambiente.
Mancha, C. (2011). **Ganado Caprino de Leche**. Subdirección General de Análisis, Prospectiva y Coordinación. Subsecretaría de Agricultura, Alimentación y Medio Ambiente
Mancha, C. (2013). **Ganado Ovino de Leche Castilla-La Mancha , Castilla y León y Navarra**. Subdirección General de Análisis, Prospectiva y Coordinación. Subsecretaría de Agricultura, Alimentación y Medio Ambiente
Martín, T. (2004). **El dominio territorial del monasterio de Yuste**., Boletín de la Real Sociedad Geográfica, CXXXIX-CXL, 2003-2004.
Martín, T. M. (2007). **El expolio del Monasterio de Yuste (Cáceres). La desamortización: el expolio del patrimonio artístico y cultural de la iglesia en España** : Actas Del Simposium 6/9-IX-2007, 681–698.

MELON JIMENEZ, M. Á. (1988). **Algunas consideraciones en torno a la crisis de la trashumancia en Castilla**. Studia Histórica. Historia Moderna, 34(1985), 61–89.
Miguel, J., Morillas, B., & Gozalo, G. R. (2014). **Caracterización del paisaje sonoro rural en la comarca de Campo Arañuelo**, 45º Congreso nacional de acústica. Murcia 2014. https://www.researchgate.net/publication/280247229
Ministerio de Agricultura, D. E. (2012). **Información estadística sobre el etiquetado facultativo de carne de cordero y cabrito en el año 2012**. MAPAMA
Montalbán B., **Estrategias pasivas de la arquitectura popular en la serranía norte de la provincia de Cáceres**. .
Nava, G. (2015). " Syrphidae (Diptera) de la comarca de La Vera , provincia de Cáceres (España)." Tesis de grado en ingeniería forestal y del medio natural. UNEX
Ortuño S., . (1994). **El ganado caprino en las áreas de montaña de la comarca del Alberche (Ávila)**, Pastos XXIV (2), 199–215.
Ortuño S.F. (1994) **El ganado caprino en las áreas de montaña: Comarca del valle del río Alberche (Ávila).** Pastos XXIV (2). 199-215. 1994
Paniagua Paniagua, J. A. (2006). **Estudio etnográfico de Losar de la Vera: segunda parte**. Revista de Estudios Extremeños, 62(1), 141–176. Retrieved from http://www.dip-badajoz.es/cultura/ceex/reex_digital/reex_LXII/2006/T.%20LXII%20n.%201%202006%20en.-abr/RV000673.pdf
Pontijas , B. (2012). **Caracterización de los sistemas de producción de caprino de raza verata: Una aproximación a los sistemas pastorales**. Trabajo Fin de Máster, Agricultura, Ganadería y Silvicultura Ecológicas. Universidad de Sevilla
Regi, T. (2000). **Plan de Gestión de la ZEPA "Río y pinares del Tiétar" y la ZEC "Río Tiétar**."Junta de Extremadura.
Riedel, J. L., Casasús, I., & Bernués, A. (2007). **Sheep farming intensification and utilization of natural resources in a Mediterranean pastoral agro-ecosystem**. Livestock Science, 111(1–2), 153–163. http://doi.org/10.1016/j.livsci.2006.12.013
Riesco Roche, S. (2005). **La lucha por la tierra: el reformismo agrario y cuestión yuntera en la provincia de Cáceres (1907-1940**). Tesis Doctoral. Dpto Historia Contemporánea. Universidad Complutense de Madrid.
Rodríguez Y. (2005). **Análisis de la racionalidad económica en explotaciones familiares sin tierra . Una aplicación a la actividad caprina extensiva en las comarcas de Monfragüe y La Vera (Cáceres)** TESIS DOCTORAL. Dpto Economía Aplicada. Universidad Complutense de Madrid.
Rodríguez Y.G., & Palacín, C. (1999) **Aporte energético del pastoreo en un rebaño de cabras trasterminante entre Monfragüe y la sierra de Gredos**. Pastos, XXIX (2), 201-216
Rodríguez, B. M., Berrocal, F. L., & Rodríguez, E. L. (2015). **Análisis y evaluación del impacto socioeconómico de los incendios forestales en Extremadura**, En: De la Riva, J., Ibarra, P., Montorio, R., Rodrigues, M. (Eds.) 2015 Análisis espacial y representación geográfica: innovación y aplicación: 1765-1774 Universidad de Zaragoza-AGE 1765–1774.
Ruiz F.A., Sayadi R., S. & Calatrava J., (2011). **Goat systems of Eastern Andalusia (Spain): Characterization and classification**. Options Méditerranéennes. Séries A. Mediterranean Seminars, 100, 53–57. Retrieved from http://om.ciheam.org/om/pdf/a100/00801484.pdf
Ruiz, F. A., Mena, Y., Castel, J. M., Guinamard, C., Bossis, N., Caramelle-Holtz, E., ... Fois, N. (2009). **Dairy goat grazing systems in Mediterranean regions: A comparative analysis in Spain, France and Italy**. Small Ruminant Research, 85(1), 42–49. http://doi.org/10.1016/j.smallrumres.2009.07.003
Sagrera, J. E. D. E. (2006). El tabaco, 25, 98–103. D.O. Pimentón de La Vera.
Sierra, Z. E. C., Gredos, D., Monte, C., & Valle, C. (2000). **Documento de Gestión de la ZEC " Sierra de Gredos y Valle del Jerte "**, Junta de Extremadura. pp 1–44.
Subdirección General de Productos Ganaderos. (2017). **Situación de mercado sector ovino y caprino**. MAPAMA
Tovar, J. J., & Rota, A. M. (1990). **El exterior de la cabra verata.** Arch. Zootec.: 43-57. 1990.
Troitiño Vinuesa, M. Á. (1987). **Dinámica espacial y lógica de ordenación en un espacio de compleja organización humana: el área de Gredos**. Anales de Geografía de La Universidad Complutense, (7), 365–376.