

High Nature Value grasslands:
securing the ecosystem services of European farming post 2013

**“The challenge of
maintaining and expanding grazing in
Mediterranean forest lands:
fire prevention and other functions”**



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INTRODUCTION

To understand natural landscape in Spain,
as in Marocco or Greece,
and in the Mediterranean in general,

*you must understand the role of grazing
or pastoralism in the territory !*

**Grazing is the most
determining factor of our landscape,**

. . . but our policies do not take it into consideration !

Spain, *and the Iberian peninsula as a whole,*
is a country of livestock farming vocation . . .

Over the last 250 years, we have had on the average

12 million LU

(LU = Livestock Units = 6 sheeps)

In these moments,

40% of total area (500.000 km²)
is devoted exclusively to animal feeding,

and grazing is the main land use over another 40% =>

80% of the land is devoted to livestock farming !



Land and cattle farming have shaped our landscape

1.-Traditional farming (*until 1975*) was:

- A subsistence farming
- Deeply integrated with land cultivation
- With all animal types
- Collective
- Grazing in open fields
- Included transhumance (*10-20% of sheep: 5 mill. sheep in 1750*)
- Has resulted in well-adapted animal breeds: *merino* and *churra* sheeps, *iberico* pigs, *fighting bulls*, etc.

2.-At some point in the last 1.000 years the threshold of sustainability was exceeded

3.-Therefore, livestock is the main responsible of our intense deforestation and soil erosion,

. . . like all around the Mediterranean !

Unlike in
Central and Western Europe

**. . . 80 % of the forest land
is grazed !!!**

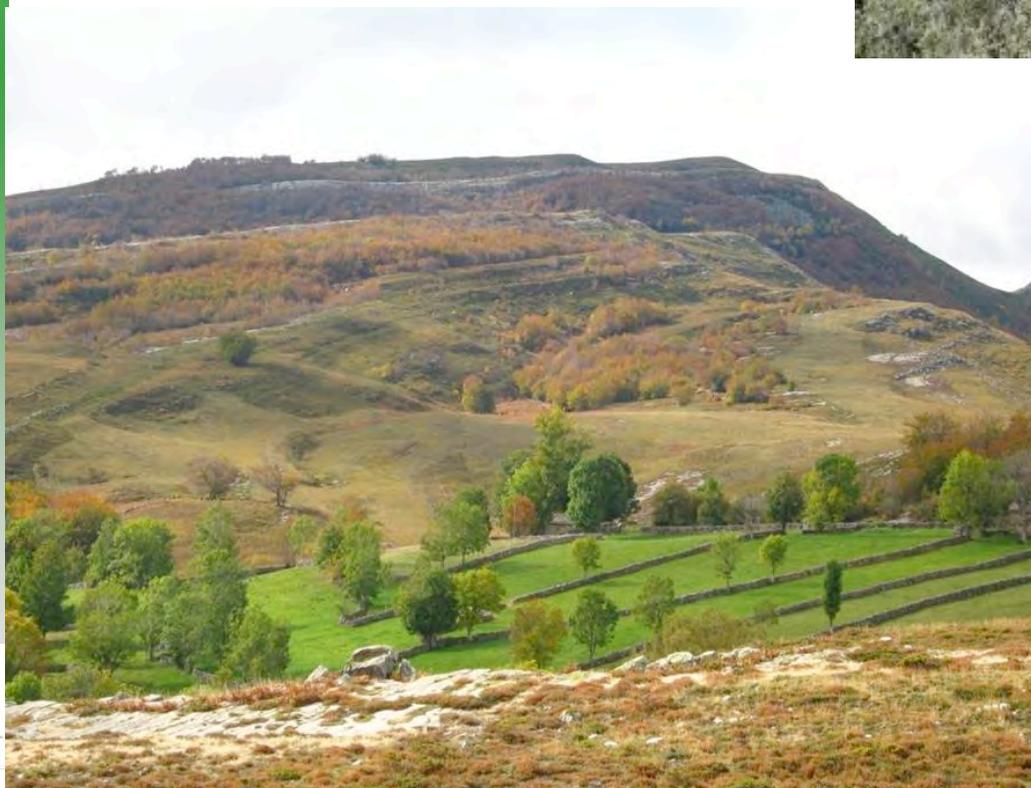






We have wonderful
pastoral landscapes,

... like in Extremadura:



And the Cantabrian Range

But also this
in Segovia
(Guadarrama Range)



And very often this !
as in the Betic Range,
in the South

From 1950 to 1975, . . .

Spain had its own agricultural revolution

Changes

***that had taken 250 years in Western Europe . . .
took place in 25 years in Spain***

In 1975 Spain abandoned its ***Traditional Agrarian System***

***4,5 million people abandoned their rural activity
(Now there are 800.000 farmers)***

***Livestock farming changed
dramatically from then on ...***

In these moments we have more than

20 million LU (instead of 12)

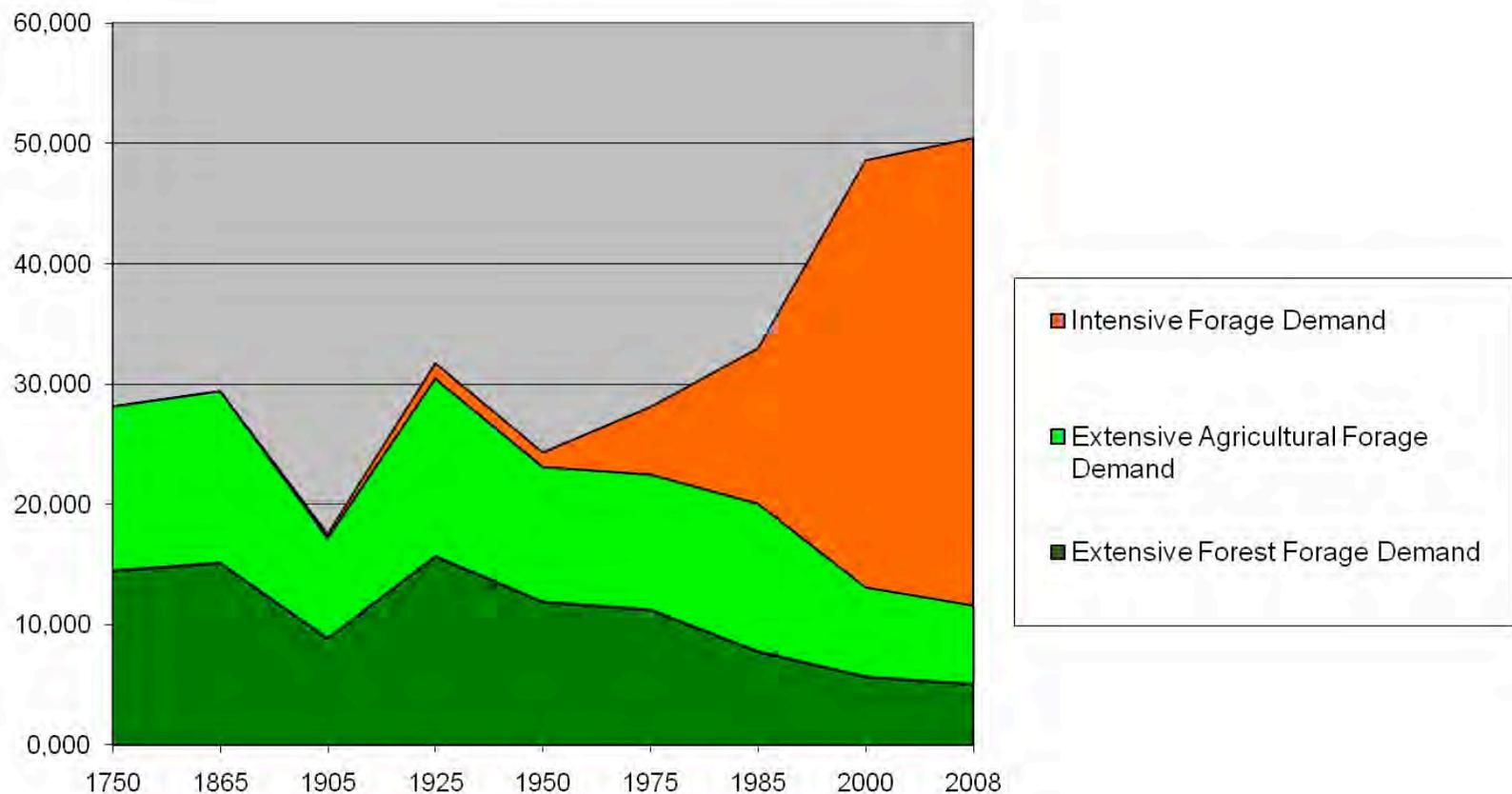
but animal feeding has changed drastically:

Grazing provides 25 % of the food demand

... And forests 10 % instead of traditional 50% !



**TOTAL LIVESTOCK FOOD DEMAND
(Mill.Tm. Barley Grain Equivalent
Mill. K Forage Equivalent Units or FEUs)**





Intensive cattle production
has had
two indisputable
advantages:

1.- To *meet increasing demand* of animal products

Mean annual **meat consumption**:

In 1950: **14 kg** * 28 mill. people = **0,4 mill. Tm.**

In 2010: **108 kg** * 46 mill. people = **5,0 mill. Tm.** (x 12)

2.- To overcome the problem of deforestation

Forest area has increased
more than **6,5 million ha. in 30 years**

(225.000 ha/year)

- *an area similar to Ireland !*
- *larger than total Romanian forests !*

In 1950: 10 mill. ha. or 20 % *(estimation)*

In 2010: 19 mill. ha. or 38 %

*According to
FRA-2005, . . .*

Spain is the 2nd
country in
forest recovery
in the world





And the reason is that:

Forest stocking density has decreased

from **1,5 sheep/ha** in 1950
to **0,5 sheep/ha** in 2000

This reduction has 3 main ***negative effects***:

- 1.-Need to buy **cattle feeds**
- 2.-Increase in **forest fires**
- 3.-Strong changes in **landscape & biodiversity**



Our livestock consume
close to **40 mill. Tm. of feed grain,**
... that we have to import in a high proportion !



And on the other hand,

forest fires have become a major problem !

From less than **2.000 fires/year** to close to **20.000** (x 10)

From less than **50.000 ha/year** to around **150.000** (x 3)

It is basically an agricultural problem !

since:

***80% of the fires originate
in farming
and agricultural work***



We suffer pastoral burning



And the result are uncontrolled forest fires . . .



And there is also a strong effect in:

- biodiversity,*
- landscape quality*

*Pastoralism applies on some of
the **Highest Natural Value lands**
of Spain and Europe !*



Pastoralism can maintain the positive tendencies
and solve some of the new problems !



With these extreme changes and actual tendencies ...

How can we maintain and expand grazing ?

We need to consider the three elements
of a livestock farm:

Productive
organization

Commercial
organization

Farmer

Land

Livestock

Land is the key factor for the future of pastoralism

Collective herds in the villages had
full access to pastures in their territories.

“When the harvest was finished all the land was open to herds”

This traditional organization,
valid for 1.000 years
has broken down !

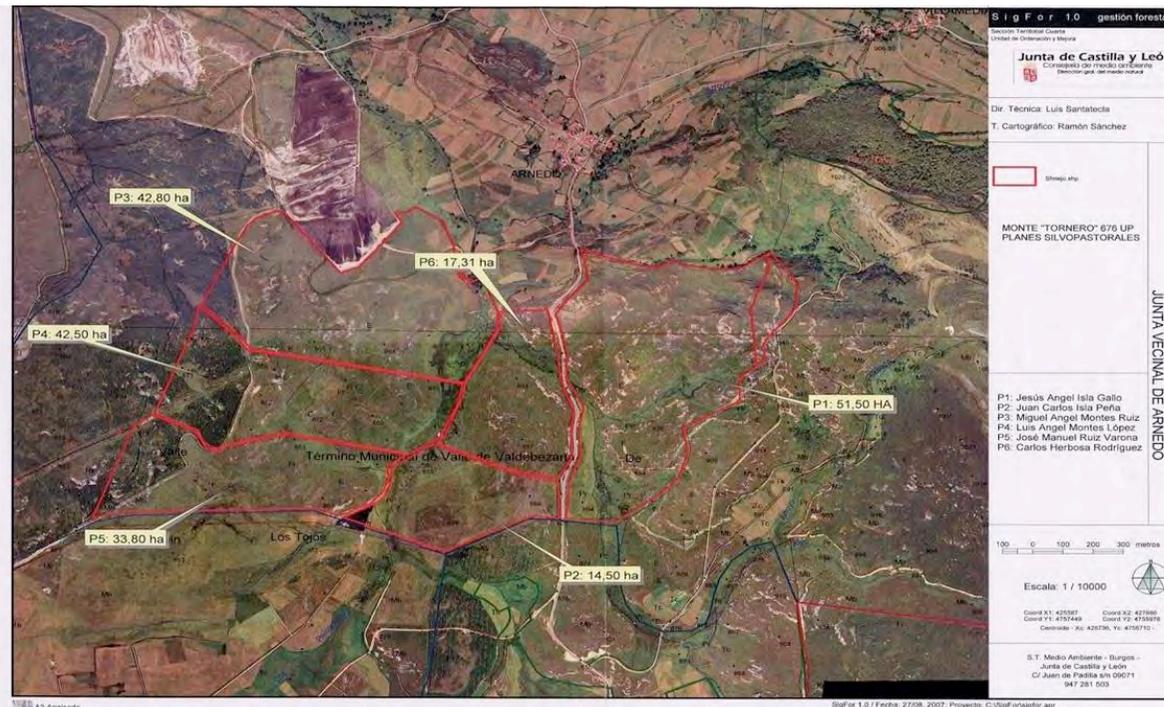
Marginal lands
are abandoned



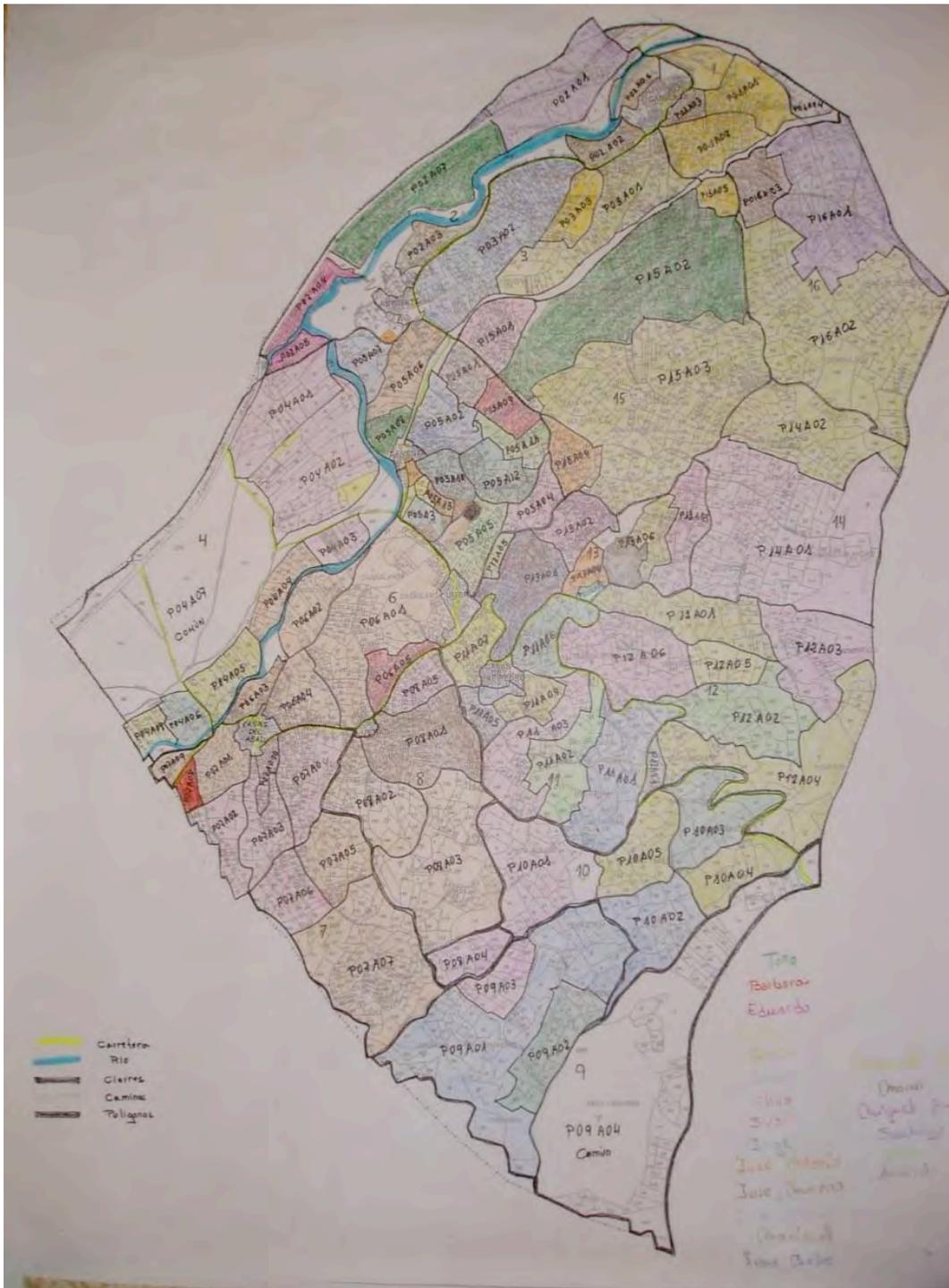
We need a new organization, valid for the next centuries !

“From collective grazing to individual farming”

- 1.-A rearrangement of holdings is needed
- 2.-New land access rights are needed



*A public “forest”
in Arnedo village,
in Burgos
has been divided
in 6 holdings
or lots*



Land owners have
to sign **land access
contracts** with
farmers ...

And that might involve
more than 500 people
in one village (900 ha)

...

like in Proumbrías,
in Ávila



**A National Program
is needed !**

And the new arrangement
has to be reflected
on the ground,

reducing the need
for non-existing shepherds
&
making work
more comfortable

...

*The XXI century
will be the
**Century of the Enclosures
in Spain***



But if we do not have farmers ... we'll have nothing !

The general tendency is towards the
abandonment of activity and
the reduction of farmers

We need to take care of generational change !

3 factors are essential:

- **Training & education**
- **Cooperativism**
- **Social recognition**

***There is the need to work
in close contact with them***





Range management
has to include

- Brush clearings,
- Respect for trees
and the landscape,

. . . and what sometimes
is more complicate . . .

- Respect for wildlife

In Castilla y León, the
“*Wolf Management Plan*”
tries to conciliate both



Anyhow,

rentability is the only way to maintain pastoralism . . .

... If it is profitable, the activity will increase !

- 1.-**Product commercialization** needs to be promoted
- 2.-**Final feed** in feedlots is crucial
- 3.-Grants have to recognize **public services** of pastoralism



Spain and Europe need a “*Support Program for Pastoralism*”

- Through a

Territorial Contract

- Based on a

Farm Management Plan

- Including a rated

Farm Improvement Plan

- Evaluating

Environmental Indicators

- Public support:

25 to 50 €/ha/year



Since 2003, Junta de Castilla y León applies the

“Regional Pastoral Program”

1.300 farmers
560 villages
250.000 ha.



Average farm: 200 ha.

75 LU

0,37 LU/ha (=> Extensive grazing)

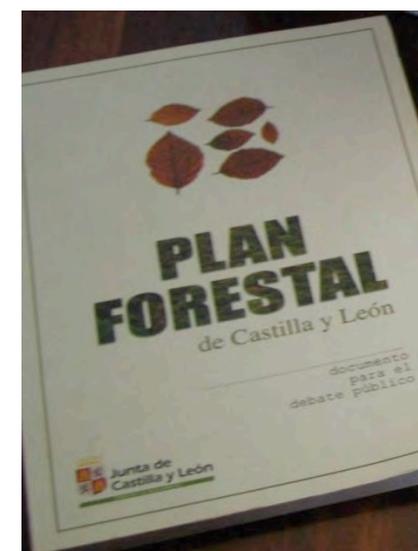
25 €/ha/year

5.000 €/year * 5 years

= **25.000 €/farm**

2,9 mill.€/year

23 mill. € in 6 years



The main objective is
environmental:

Fire prevention



*In the more affected municipalities of the province of
Burgos fire numbers have decreased by 70 %*

But also other results have been achieved:

34.000	ha.	Brush clearings
750	km.	Fences
270	units	Drinking ponds

The Pastoral Program is part of

Plan-42

A fire prevention program
of social action

in the 42 municipalities that concentrate 50% of fires.

Working at local level

Promoting close contact with farmers



Plan-42 and the farming sector:

OBJECTIVES

- Cultural change in the use of fire
- Sector improvement
- Profitability and working conditions
- Training and education
- Product quality and marketing
- Social recognition

ACTIONS

- Support and advice
- Cooperatives promotion
- Exchange of experiences
- Organization of sectorial meetings
- Integrate the sector with other sectors: tourism, mycology



***Thanks
for your attention !***

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