MAIN ASPECTS TO PROMOTING ORGANIC GOAT PRODUCTION IN MOUNTAINS AREAS OF ANDALUSIA (SPAIN)

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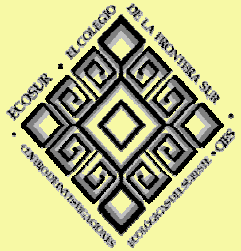

"Biodiversity and Sustainable Animal Production Systems"

Barcelone 24 to 27 of August 2009

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1. INTRODUCTION

During the past ten years in Andalusia (where 39% of the goats in Spain are found), dairy goat farms have been greatly intensified and specialized, leading to partial or total elimination of pasturing as an animal feed source.

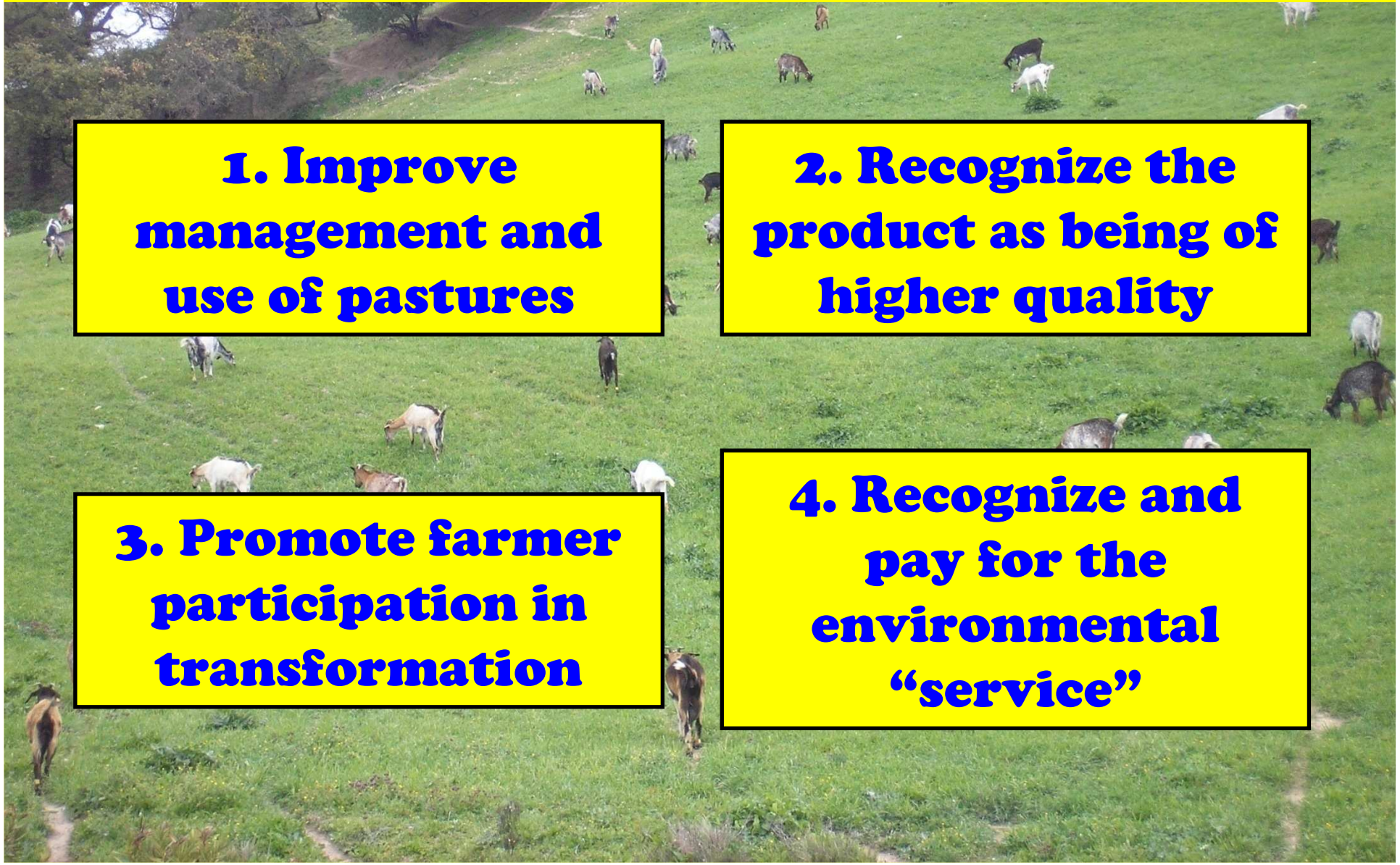
There are several causes to this intensification. Two of them are:

- The fact that the product of pasturing systems is not differentiated from that of intensive systems upon marketing
- The lack of shepherds

One of the consequences of the lack of goats in mountainous areas is the excessive growth of vegetation, with the consequential risk of fires and lack of use of the land.

From the point of view of sustainability, it is important to halt this intensification of rural areas where goats are raised.

What could be done to allow pastoral systems to be maintained?

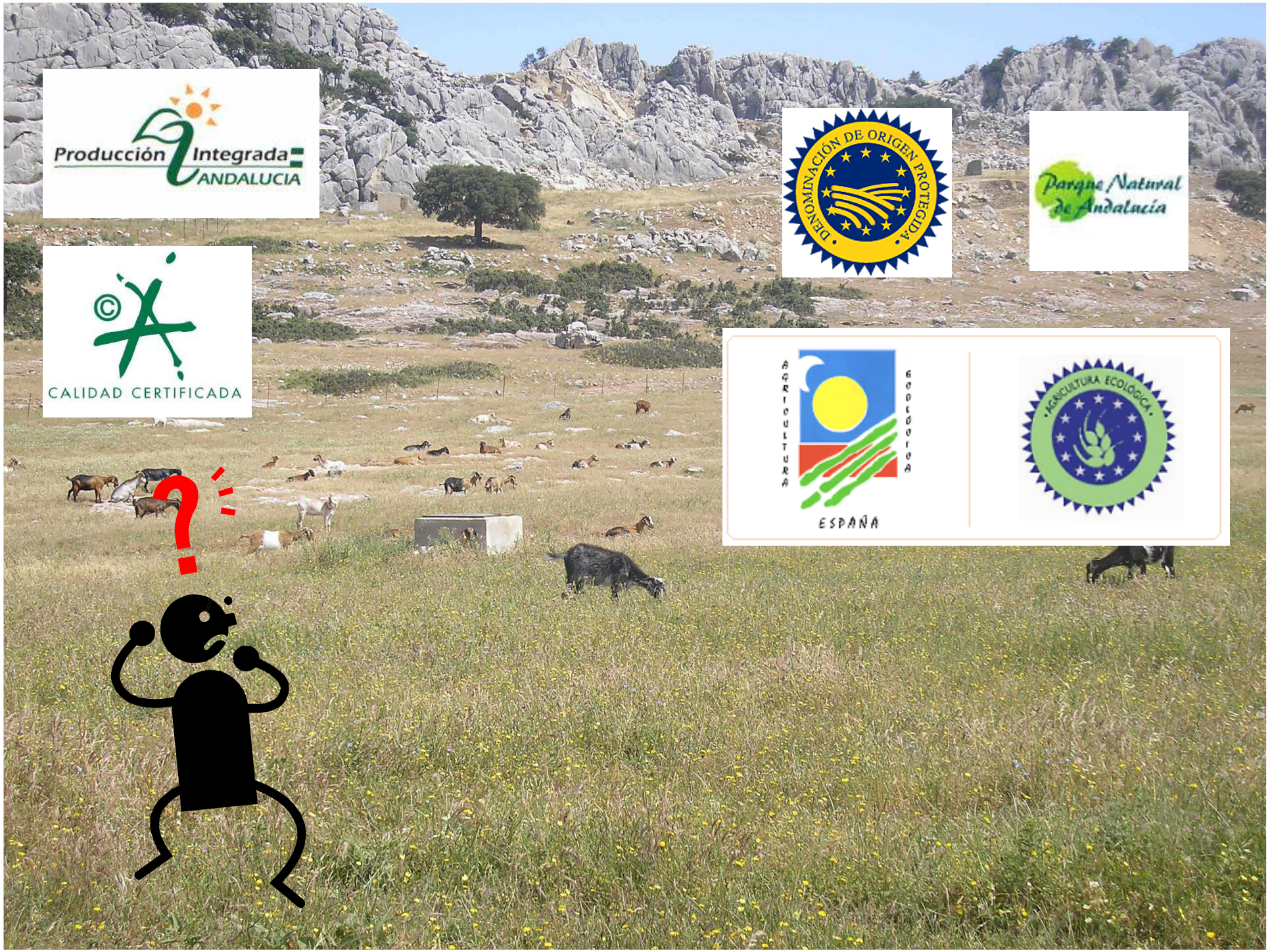


1. Improve management and use of pastures

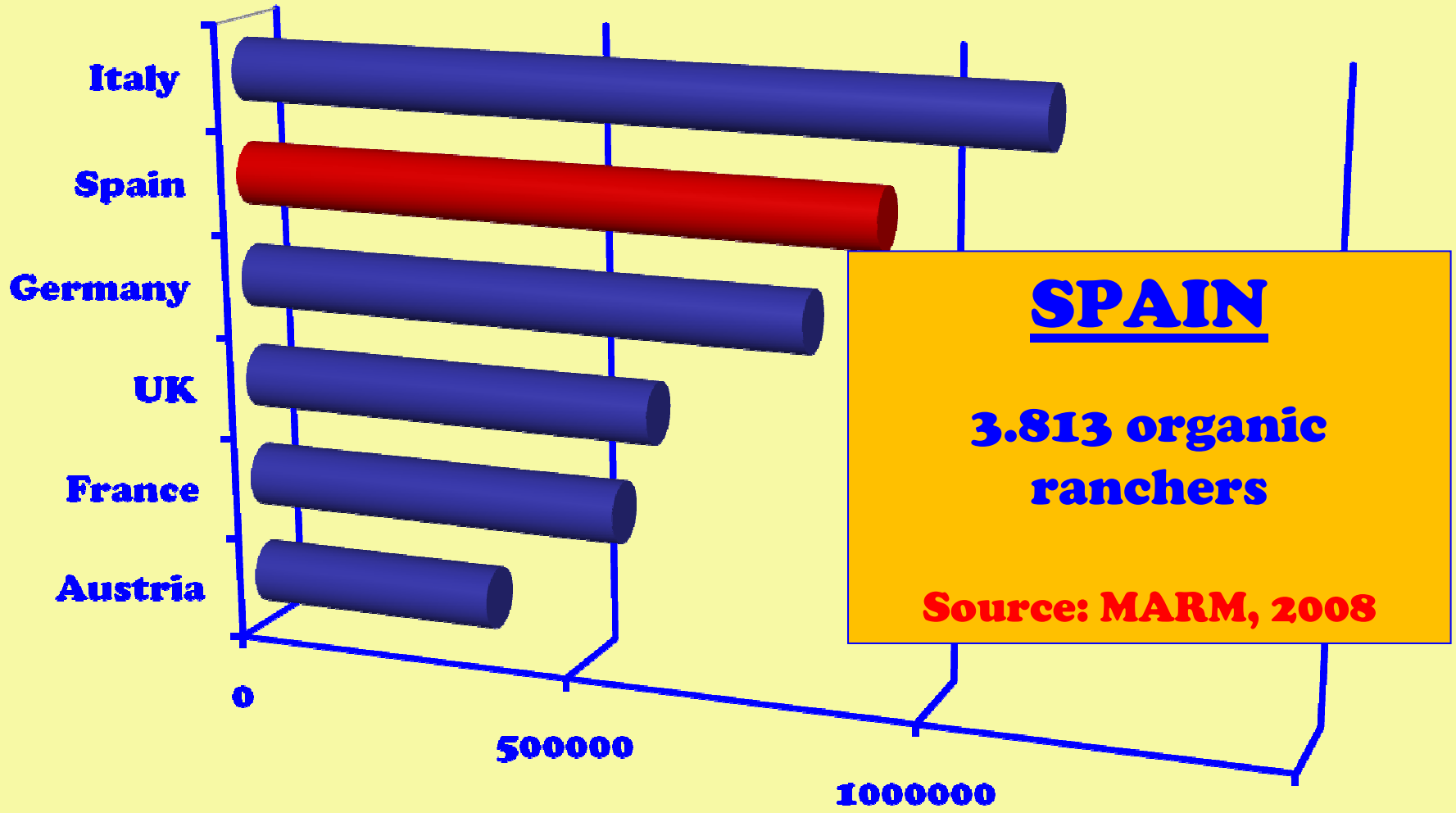
2. Recognize the product as being of higher quality

3. Promote farmer participation in transformation

4. Recognize and pay for the environmental "service"


Producción Integrada
ANDALUCIA
DENOMINACIÓN DE ORIGEN PROTEGIDA
Parque Natural de Andalucía
CALIDAD CERTIFICADA
AGRICULTURA ECOLÓGICA
ESPAÑA
AGRICULTURA ECOLÓGICA

Land under organic management (ha):
Principal countries in Europe



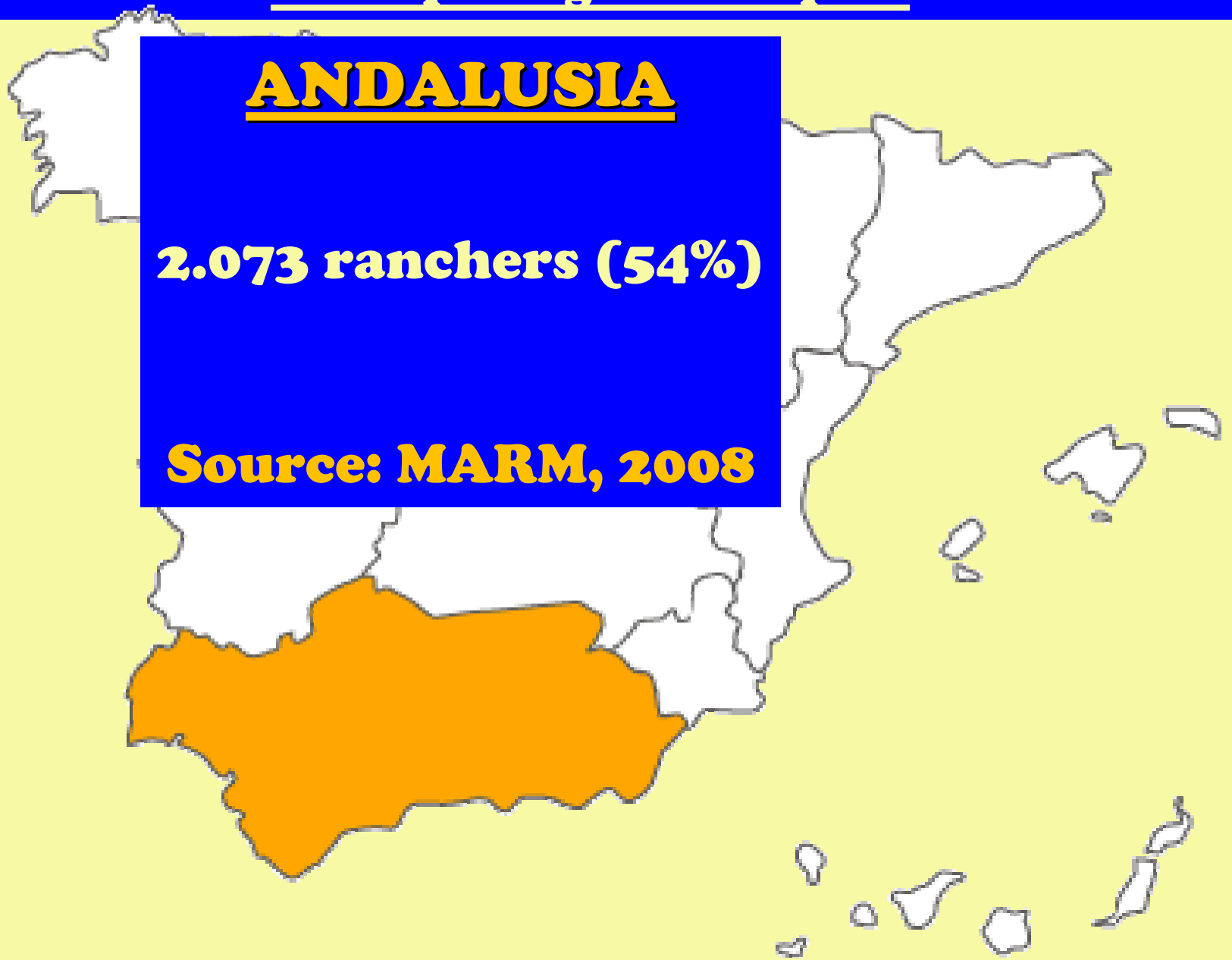
SPAIN

3.813 organic ranchers

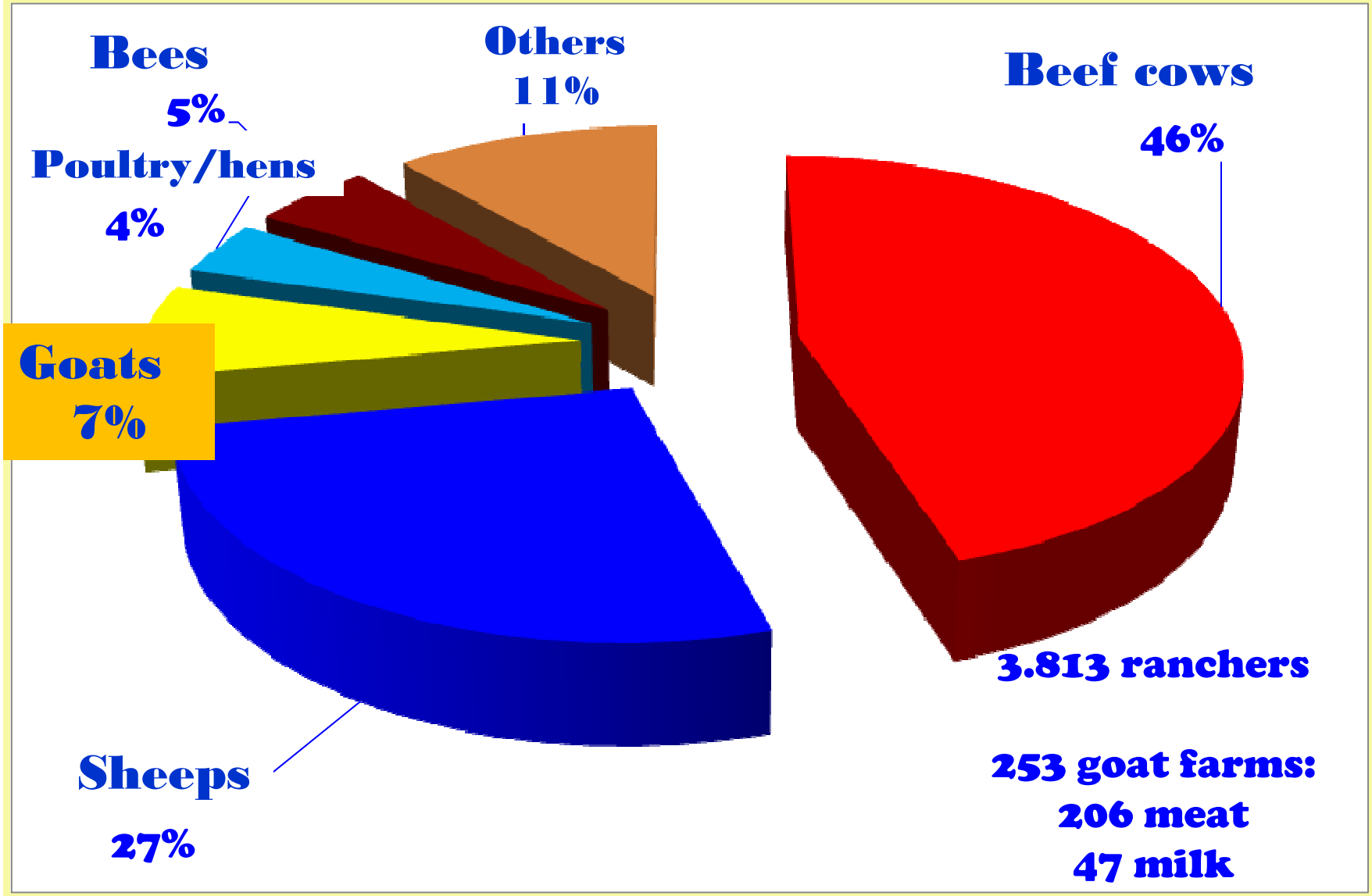
Source: MARM, 2008

Source: IFOAM, 2008

Land under organic management:
Principal regions in Spain



Distribution by species (Spain)



Source: MARM, 2008

In Andalusia, goat farms represent a reduced percentage of organic ranching, with a clear predominance of meat production.

99 goat farms:
74 meat
25 milk

Source: MARM, 2008

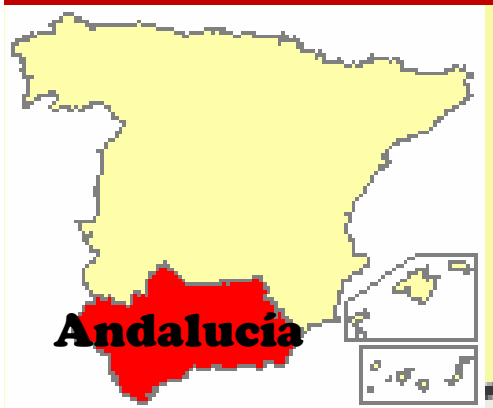
Many pastoral farms still exist in Andalusia

Giving value added → **Transformation to organic ranching**

"Conversion of mountainous goat production systems to organic ranching: viability and strategies of change"

Diagnostic of possibilities of conversion to organic was carried out

2. METHODOLOGY



Blanca Serrana

Payoya

18 GOAT FARMS (2006-2007)

12 no organic **6 organic**

Monthly monitoring following method proposed by FAO-CIHEAM adapted to pastoral systems by us

SOWT analysis

Hierarchy of problems using the Mojica structural method (1991)

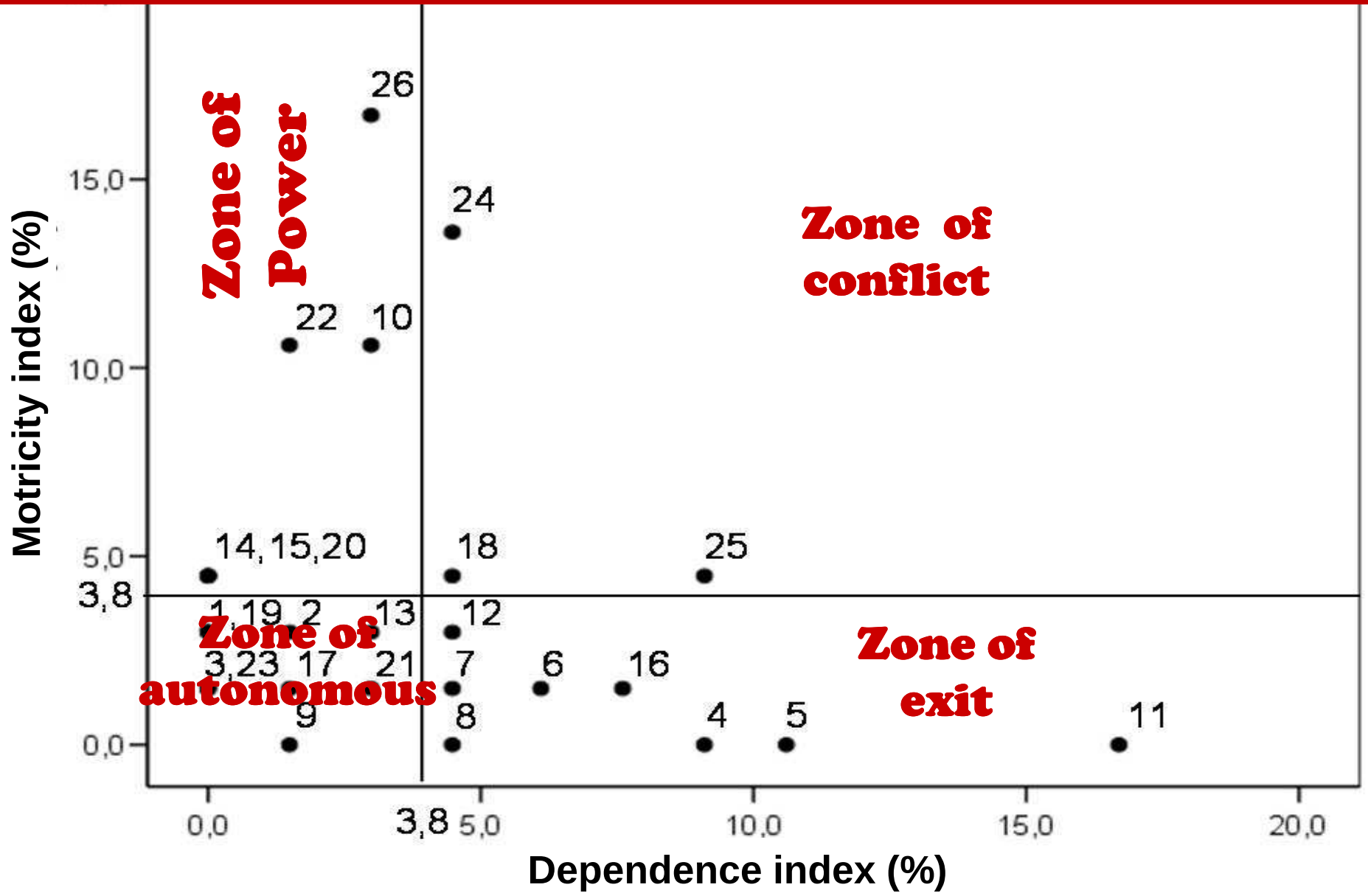
Matrix for construcing a hierarchy

In order to prioritize the problems, interdependence is established among them with the objective of identifying such which most influence the others.

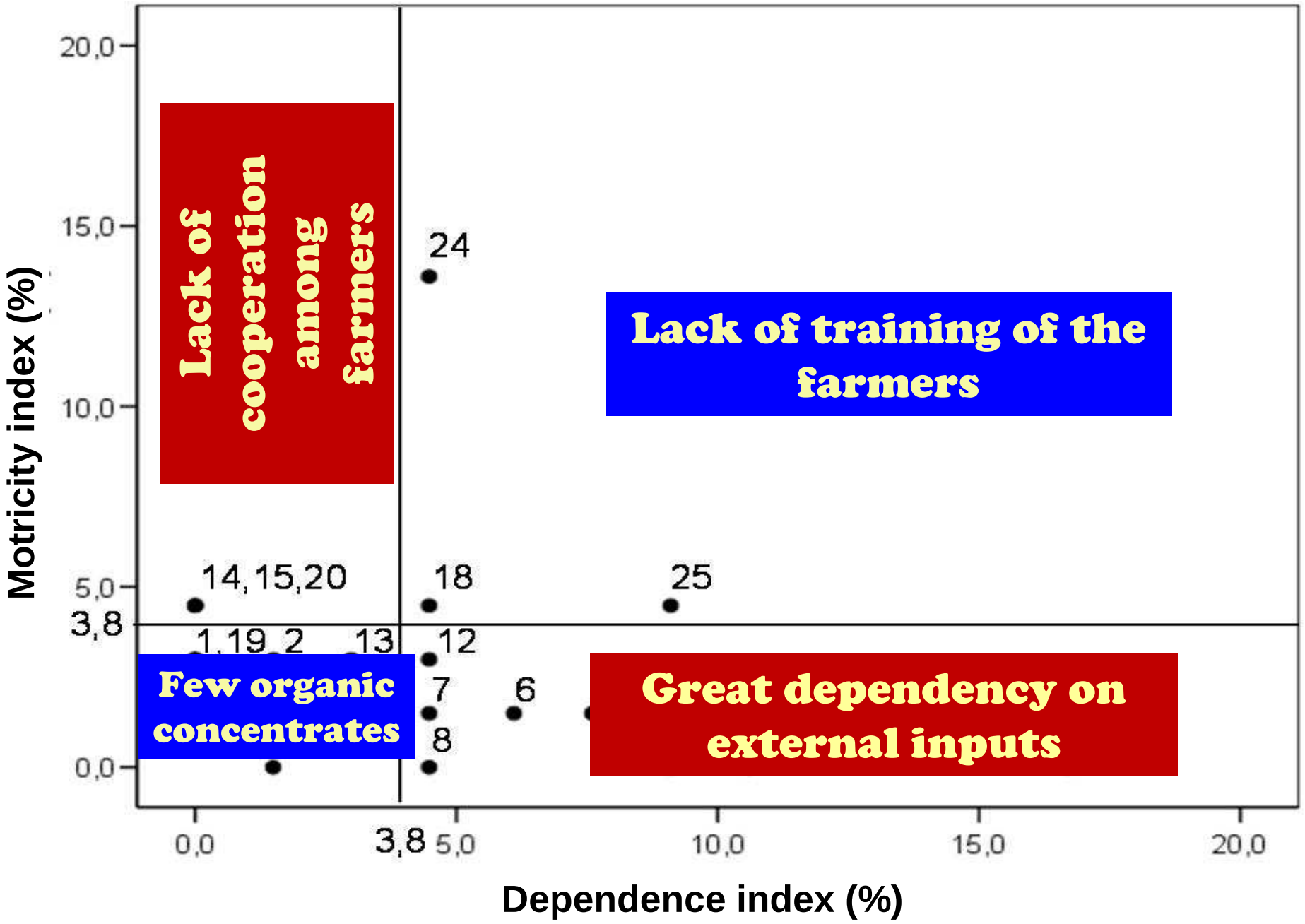
Problems are ordered by rows and by columns in a double-entry table, and it is decided if each of the problems in the first column influence each of the problems which appear in the first row. And this successively. Influence is indicated with a "one".

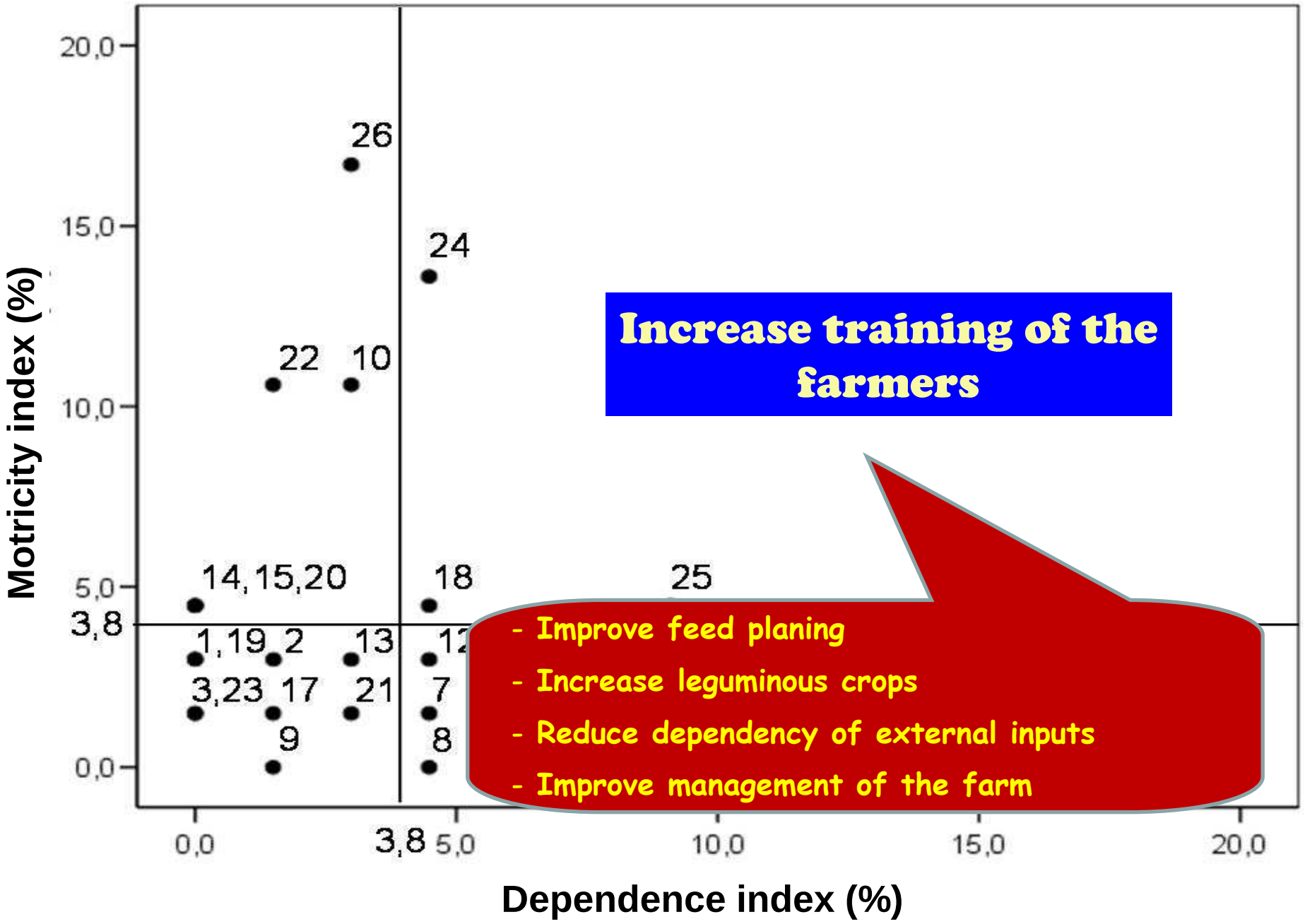
The sum of the numbers row by row indicate the times that each of the problems impacted the rest. From there, the *motricity index* is constructed. This indicates the force that each has on the others. The sums of the values column by column represent the number of times in which each problem is influenced by the others, thus generating the *index of dependence.*

3. RESULTS


Zone of Power
Zone of conflict
Zone of autonomous
Zone of exit
Motricity index (%)
Dependence index (%)
0,0
5,0
10,0
15,0
20,0
3,8
26
24
22
10
14, 15,20
18
25
1,19,2
13
12
3,23
17
21
7
6
16
9
8
4
5
11

Some examples




Motricity index (%)
20,0
15,0
10,0
5,0
3,8
0,0
26
24
22
10
14,15,20
18
25
1,19
2
13
12
3,23
17
21
7
9
8
0,0
3,8
5,0
10,0
15,0
20,0
Dependence index (%)
Increase training of the farmers
- Improve feed planing
- Increase leguminous crops
- Reduce dependency of external inputs
- Improve management of the farm

Problems in the "zone of independent problems"must be solved

The external supply of organic feed is scarce, expensive, and not very standardized

Economic subsidies are late in arriving (up to three years)

Organic milk is sold to the conventional dairy industry, and it is mixed with non-organic milk

Actuations to solve “problems in the zone of independent problems”

Promoted production and distribution of organic feed

Facilitate administrative procedures and payment of agro-environmental subsidies

Support the creation of small artisan cheese-making operations in milk producing areas

Self-sufficiency in animal feed

Grass production is highly seasonable

Natural grass is generally not very abundant, and low-quality shrub grasses predominate

It is very difficult to grow and harvest animal feed

Dairy goats must consume daily a great quantity of high-quality feed, forage as well as concentrates

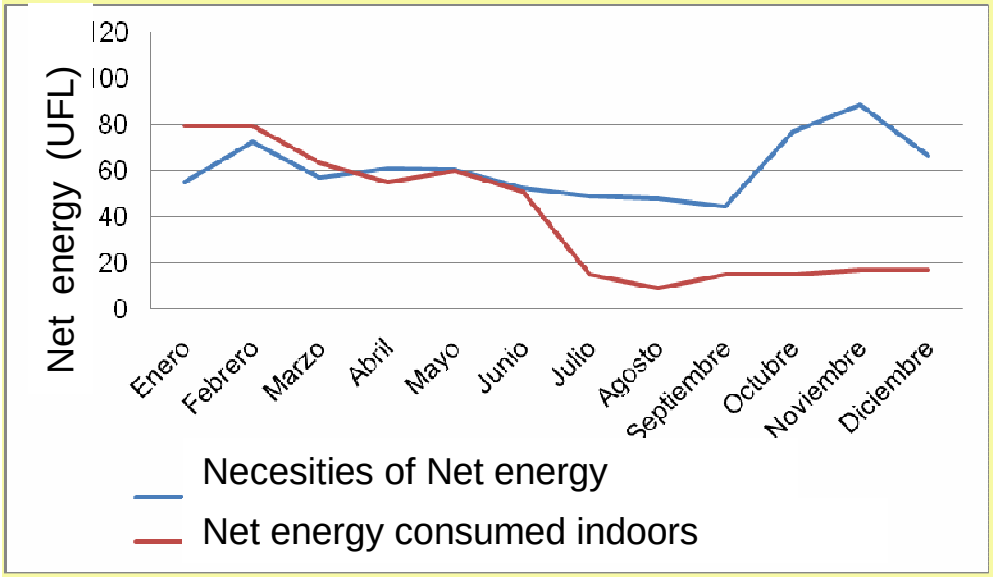
Table 1. Comparative analysis among farms

Farm	ha/goat	% NE[1]	Expenditure/ goat[2]	Income/goat[3]
C2	0,28	34	73 €	223 €
C6	0,54	10	68 €	192 €
C8	0,85	69	51 €	202 €

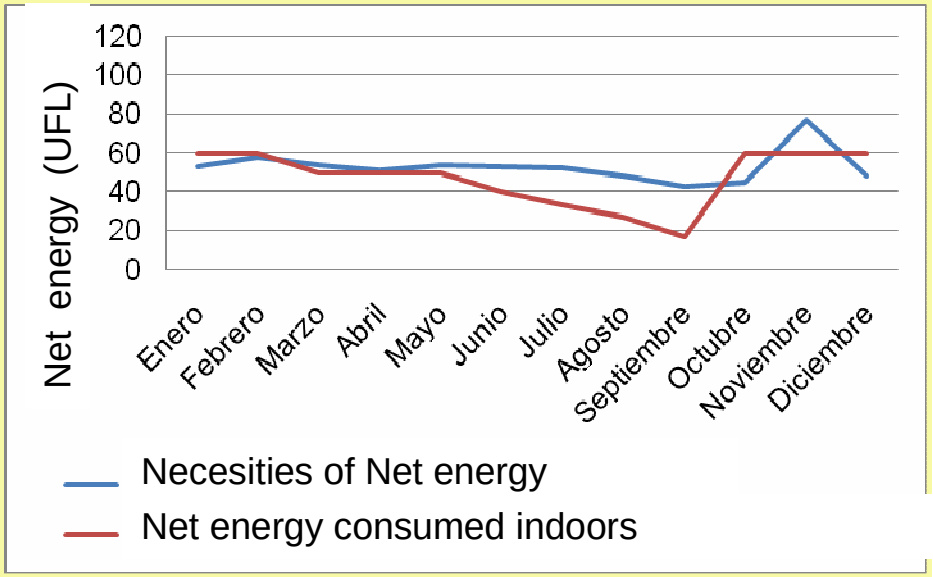
1. Percentage of necesities of Net energy covered by pasturing
2. Refered only to animal feed, mainly concentrates
3. Refered only to sale of milk

Evolution of monthly necesities of net energy and energy consumed indoors, for dairy goat

Farm C2, 2007

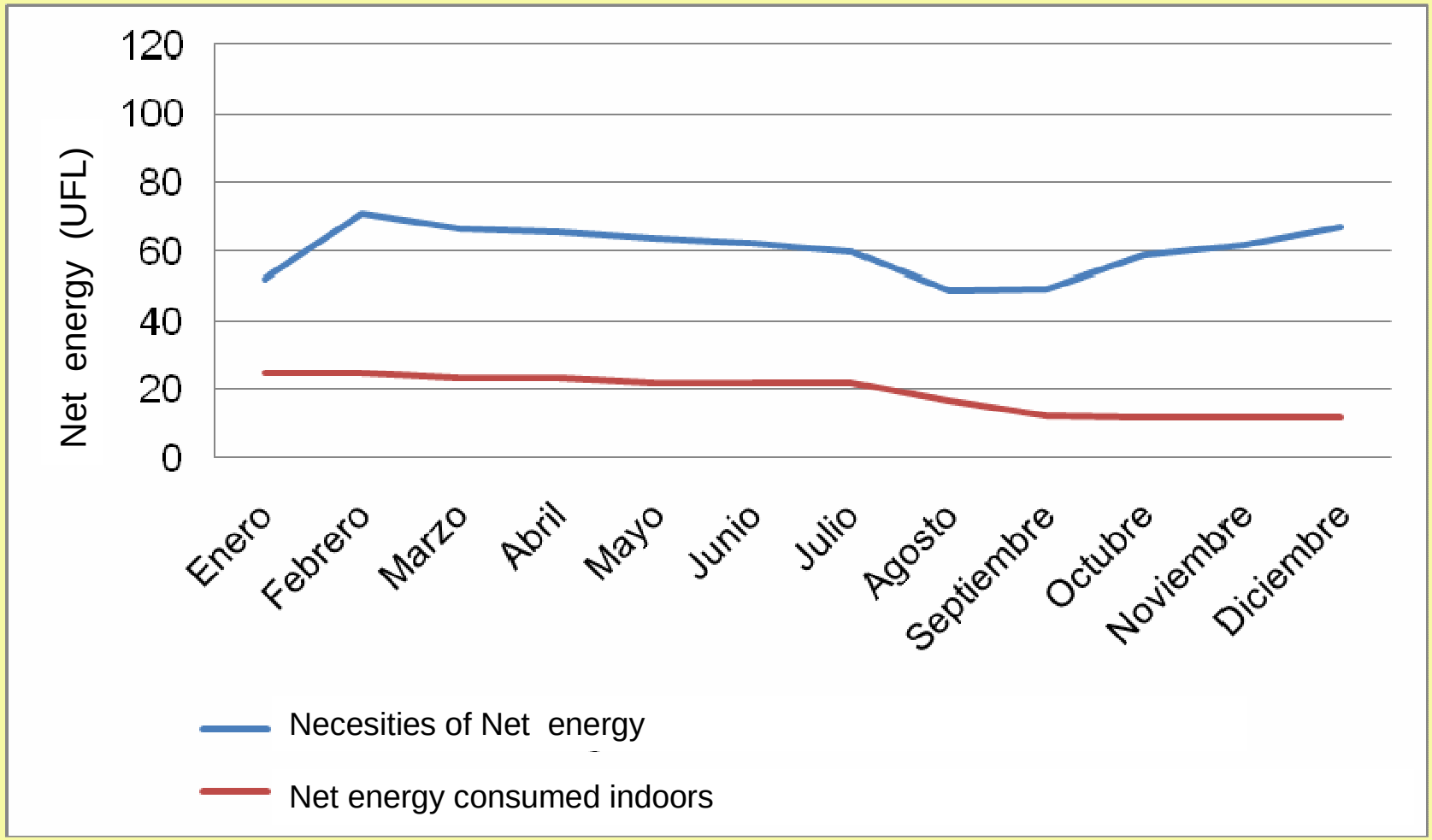


Farm C6, 2007



Diference between lines represent energy obtained by pasturing

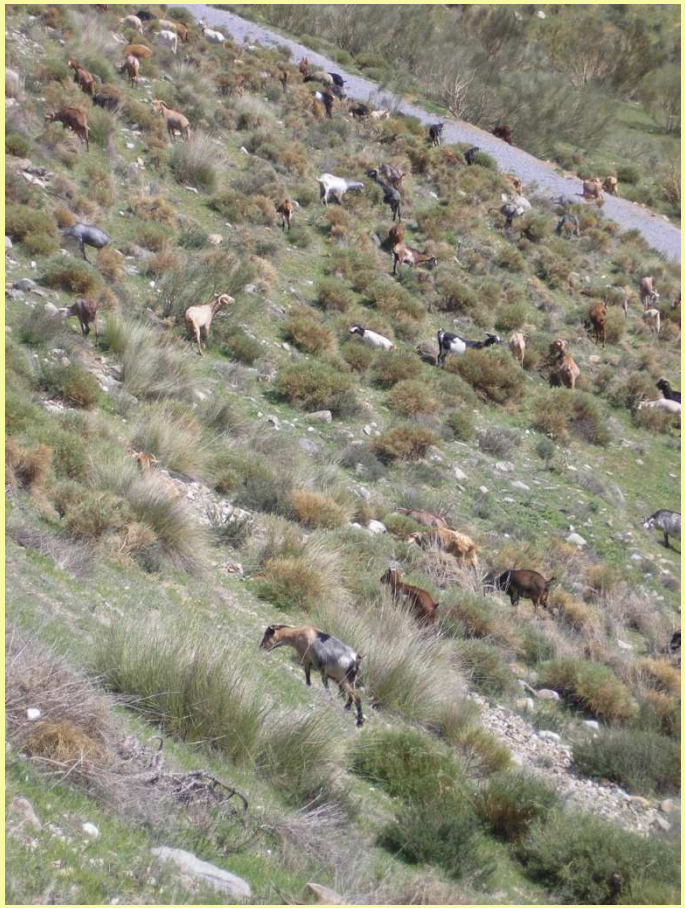
Evolution of monthly necesities of net energy and energy consumed indoors, for dairy goat (Farm C8, 2007)



Diference between lines represent energy obtained by pasturing

To increase feed self-sufficiency

1. Adequately organize and manage goat pasturing



2. Combining natural shrubs and grasses, cultivated forage crops, and crop residues

To increase feed self-sufficiency

3. Look for maximun coincidence between goat nutritional needs and production of grass

To increase feed self-sufficiency

4. Adequately plan supplementary feed to maximize the use of seasonal natural grasses.

To organize cooperatives to purchase organic feed

Conclusions

1. Promoting organic goat farming in Andalusia only makes sense for dairy farms.
2. Two basic aspects must be resolved: promote the market for organic animal feed, and promote small, local, organic cheese-making businesses.
3. Not all mountains goat farms have the potential to transition to organics. They require sufficient surface to be able to produce the most diversified grasses possible.
4. Farmers who wish to transition to organics should change their objective from obtaining the greatest possible productivity to that of making the most of pasture resources, while adequately planning reproductive and feed management.


Thanks to all participant in
the proyect and thanks
for your atention