

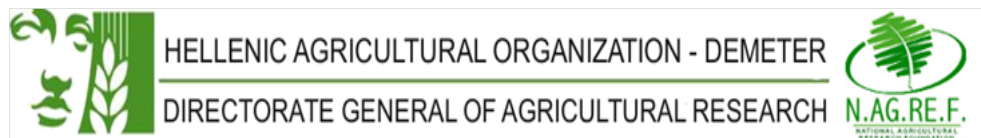
# Final Seminar

## Small ruminant local breeds and sustainable regional development: The challenges in the Mediterranean area Experiences from the DOMESTIC project

### Case study of Ipeiros, Greece



*Ch. Ligda, E. Tzouramani and E.N. Sossidou*



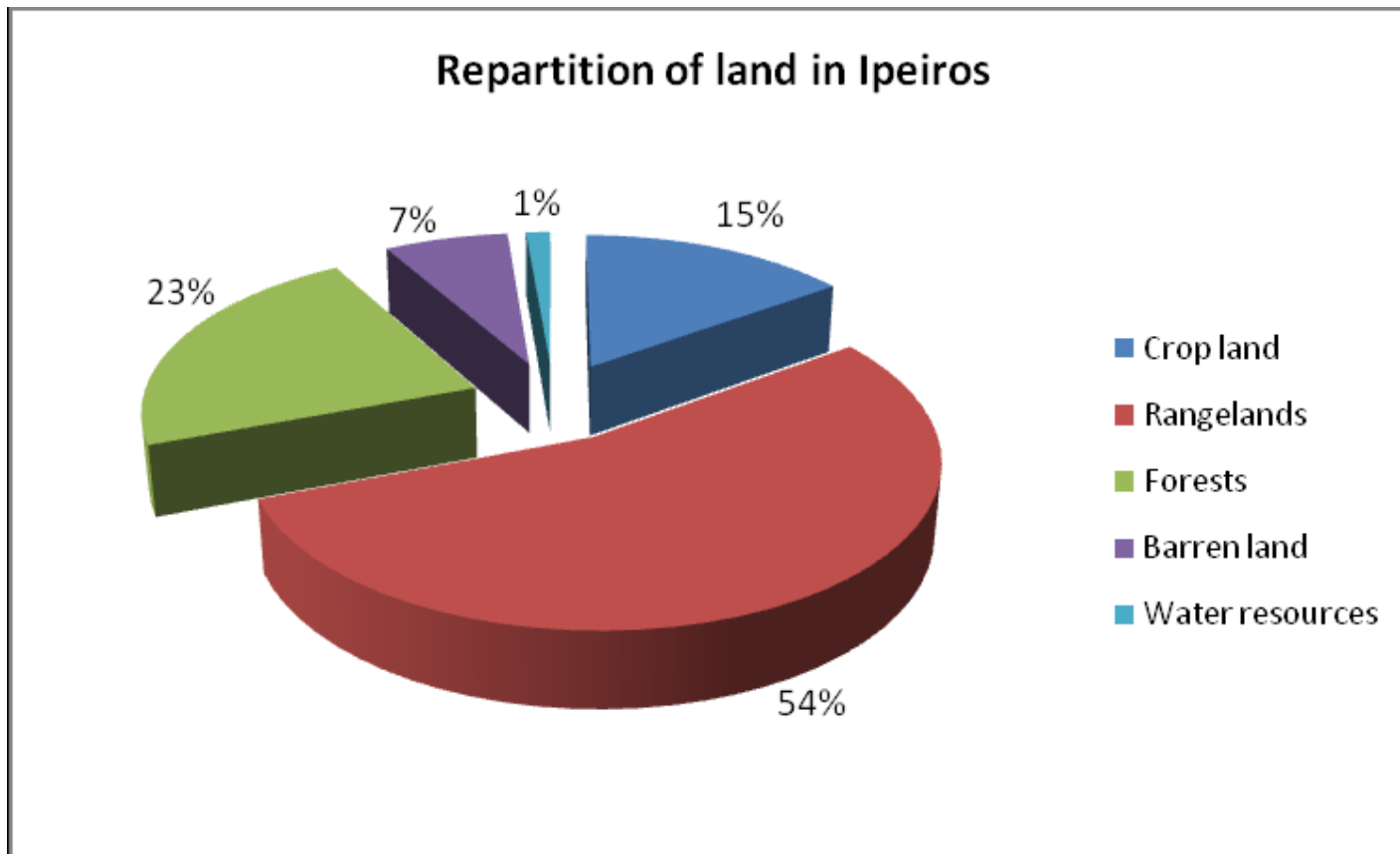
Institut Agronomique Vétérinaire Hassan II, Rabat, Morocco  
16– 17 December 2014



# Where in Greece ?

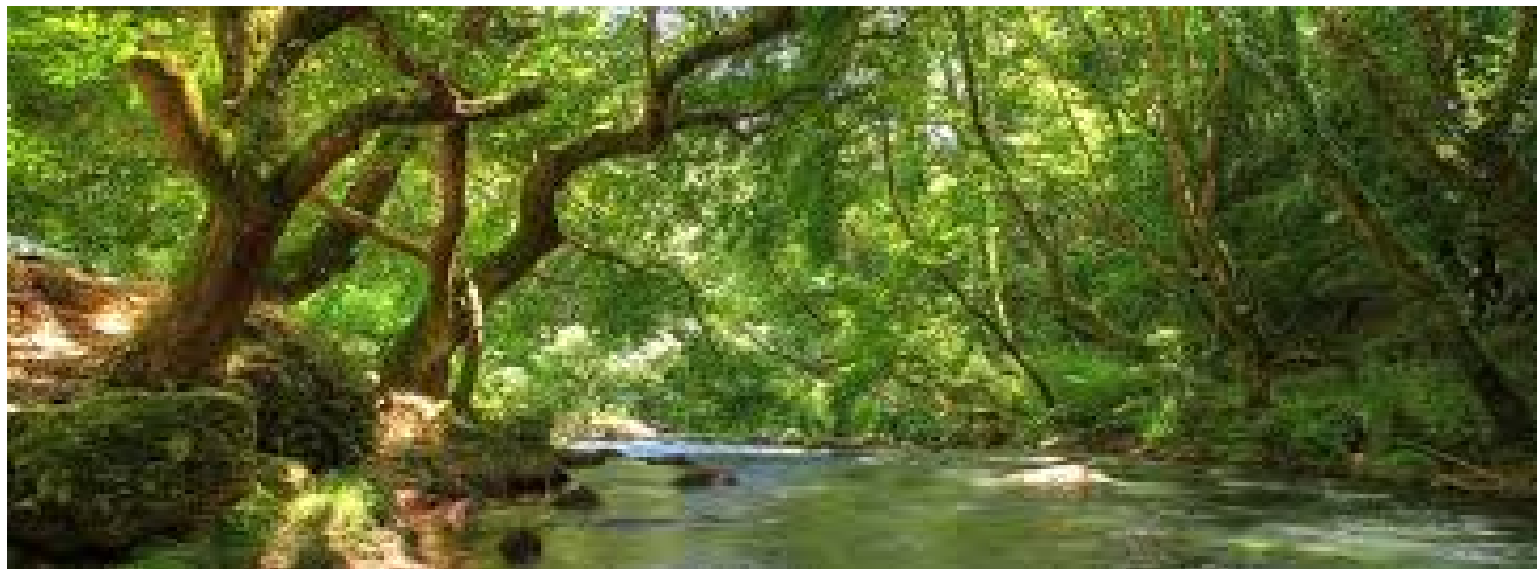


# Natural Environment



Total area: 9.203 km<sup>2</sup>





- **A mild Mediterranean, with humid and cold winters**
- High rainfalls and snowfall
- Many valleys, gorges, lakes and rivers
- The most important river of the area is Kalamas river.
- The mountainous and semi-mountainous zone is crossed by Drin, Gormos and Nezeros rivers





## 4 key zones

- (a) **littoral area** of Preveza and Thesprotia: tourist developments, maritime transportations, fishing by bringing together important opportunities of development;
- b) **mountain volumes** area which extends along the border of the Region towards the departments of Ioannina and Arta : advantages of the traditional communities, cultural heritage and natural beauty;
- (c) area of **farmland** with high performance capabilities that contains the part of the South - West Region (parts of the departments of Preveza and Arta) ;
- (d) the further zone of **mountainous and semi mountainous areas**.



**Population:** 336,856 habitants (3.11% of the total population of the country);

**Population density:** 37 habitants per square kilometer ( 81.5 at country level);

**The Gross Domestic Product per capita:** negative deviation (-26.4%) from the country's average (2003);

**The Gross Value Added:** 4,600 €, (2,3% of the total GDP).



In general, most of the basic economic indices for Ipeiros are lower than those of the corresponding national average.



# Meat and Milk Production

Meat	Production (tonnes)	% of total production
Beef	2,899.5	4.92
Sheep	8,459.1	11.67
Goat	2,744.8	7.56
Pork	17,587.9	15.32

Milk	% of total production
Sheep	11.16
Goat	5.72
Cow	3.70





# The survey

Association of Pastoral Farmers of Epirus  
(EMKH)

290 Farmers (168 raise sheep and goat)

3 Municipalities OF Ioannina county  
Ioannites, Metsovo, Pogoni

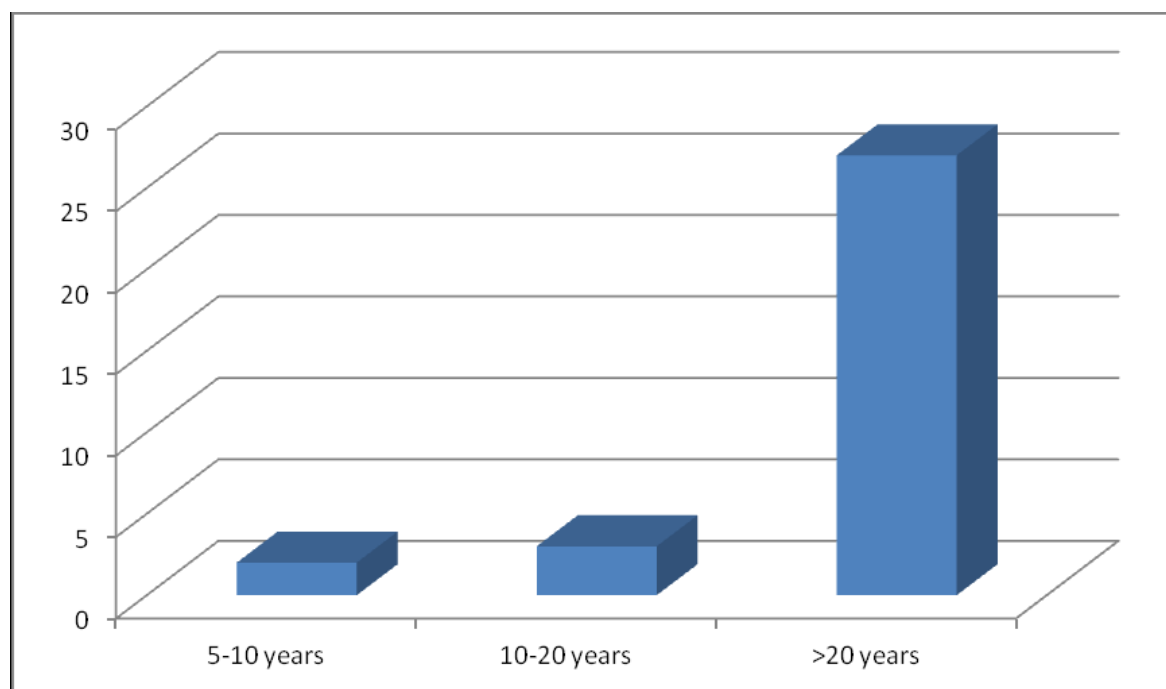
Personal interviews with farmers (32)  
based on a structured questionnaire





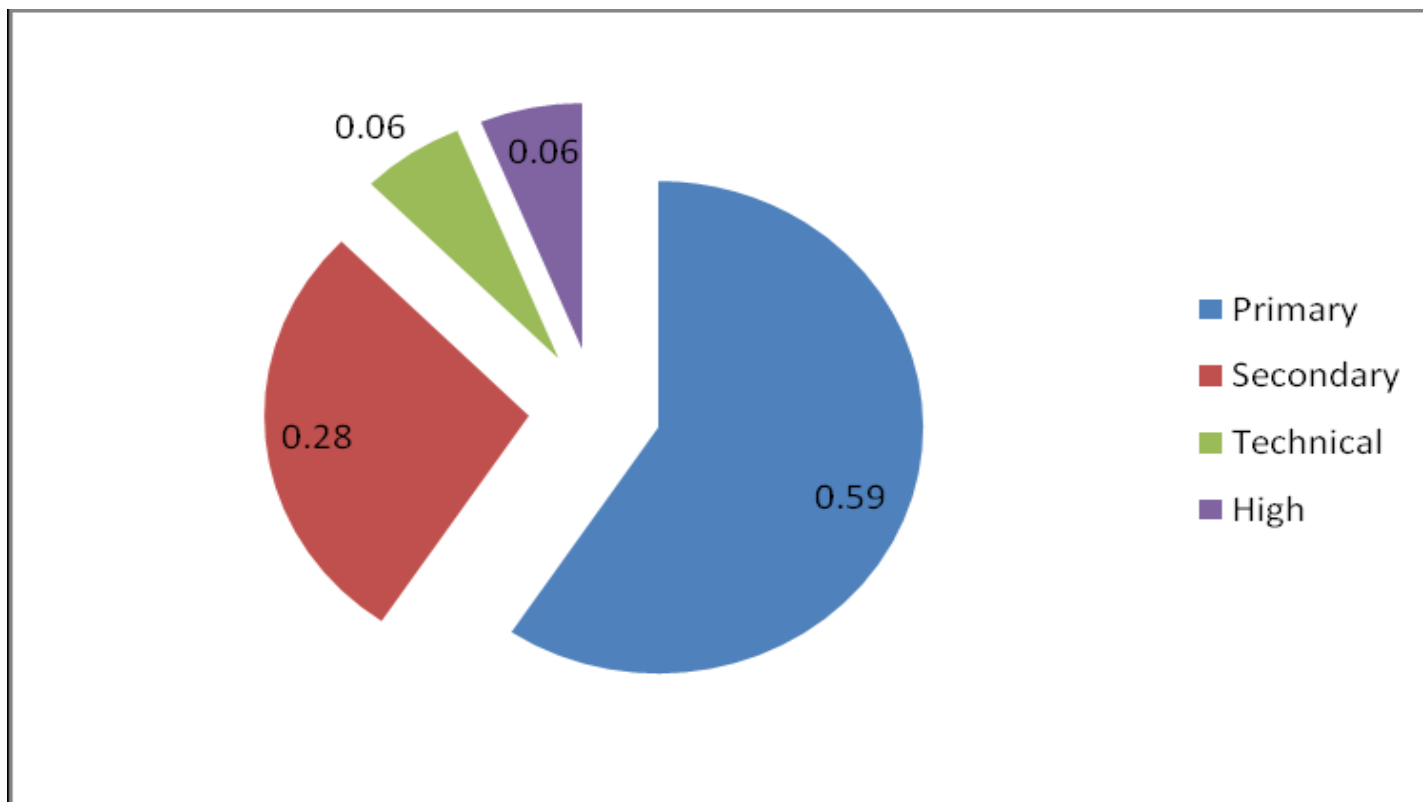
# How many years you have this activity?

85% raise livestock for more than 20 years

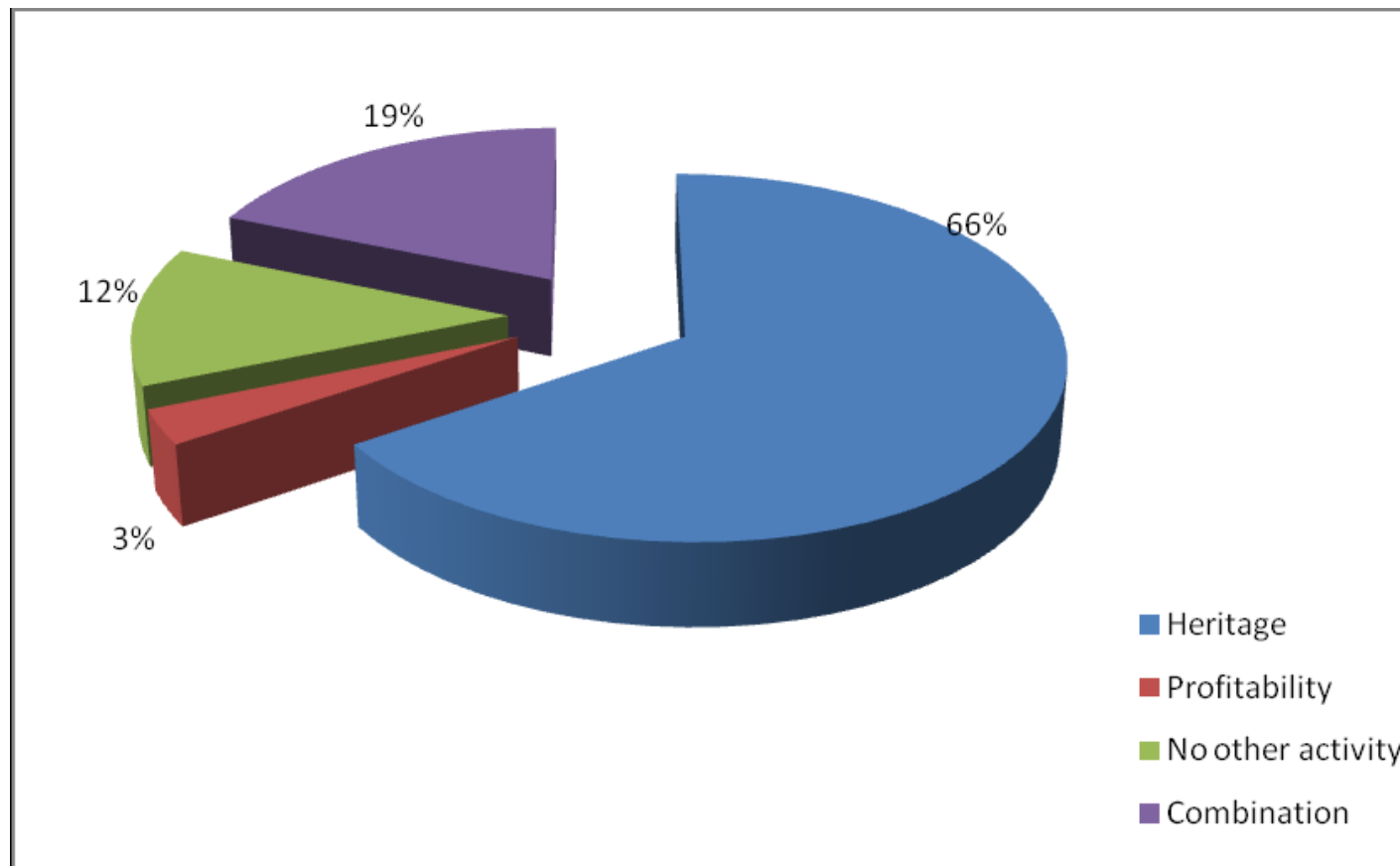


# Educational level-Age

51,4 average age of farmers interviewed



# Why did you chose this activity?



# Results from the survey

## Management system-Feeding-Transhumance

The management system is divided in 3 periods:

1. **From November until February:** the animals are housed and complementary feeding is provided, forages and concentrates;
2. **March until May :** the animals move to short distances and housed during the night. Grazing is the main feeding resource;
3. **From the end of May or June, until October:** the animals move to the mountain pastures, more than 1200m. Feeding is exclusively based on grazing. The mountain pastures are mainly community lands and are divided in different parts for each farmer.





# Results from the survey

## Water availability

**Farmers do not face problems regarding water availability.**

Most of the farmers water their animals with water from rainfalls and/or ground water that is collected in small tanks and ponds they construct by themselves using natural material. Animals have access to water on a regular basis at pastures.

Farmers stated that **the quality of the water is good** and they do not relate water quality with health problems such as diarrhea or other. Usually the tanks or ponds are placed in the center of a big pasture and serve for more than one flocks.



# Results from the survey

## Labour

Farmers stated that about the **80% of routine labour is dedicated to milking** since they rarely have milking machines; they milk by hands. Lambing period is also a period of extra duties with work load. During winter, animals are stabled and receive complementary feeding, that corresponds to additional work for the farmer (for feeding the animals and cleaning the stables).

All procedures and work related to animal husbandry and breeding are based on their **own capacities**. Non-family members are hired either at a yearly basis or periodically, as **shepherds** to bring animals to pastures. This labour cost is about 350-700 Euros per month plus additional benefits provided by the farmer (accommodation and food).



# Results from the survey

## Breeding-Reproduction

**Lambings / kiddings** occur in two periods, in November to December, which is the main period and February, March for the ewes / goats that enter the reproduction period.

**Artificial Insemination (AI) is not performed** and also not other techniques for reproduction. Rams and bucks used for breeding originate from the flock / herd, while in some cases the farmers buy from other farmers.

**Culling** occurs on average around 6 years for ewes and 7 for goats. The rams and bucks are kept for 4 to 5 years on average, while there are few farmers that change the rams each two years. One ram / buck is used for every 25 ewes / goats.





# Results from the survey

## Health management

Most important diseases are **mastitis** (in several cases 'black mastitis' observed) and parasites. In general, farmers try to prevent diseases by bringing animals to pastures, the application of vaccination i.e. for brucellosis and sometimes by applying different treatments.

Farmers stated that they do not have the support they need by the veterinary services since they are somehow '**isolated**' in high mountains without access to infrastructures and roads, mainly during hard winter periods.





# Results from the survey

## Performance Recording / Monitoring

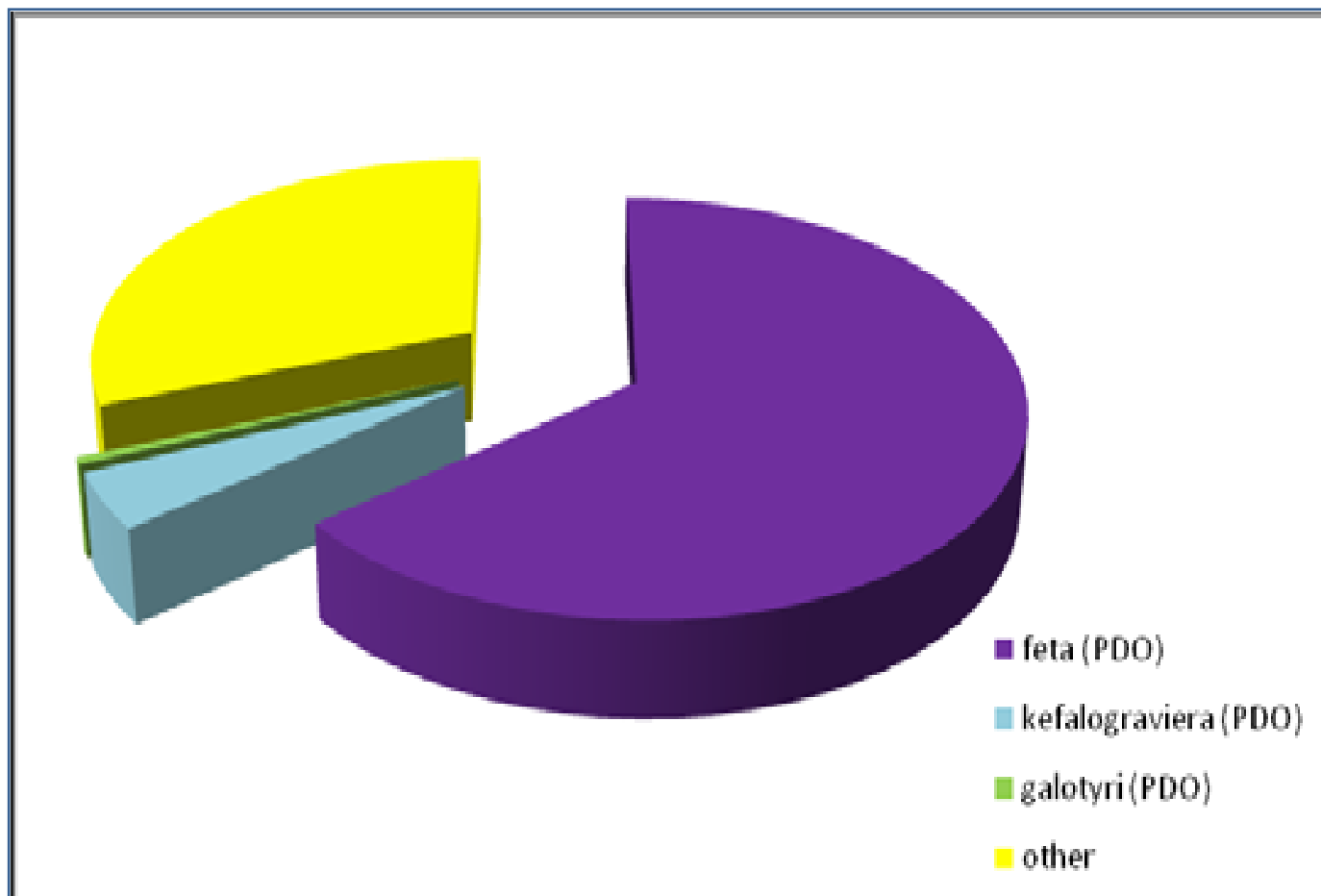
Performance recording only occurs in few flocks with purebred animals of Katsika and Kalarritiko and are included in **conservation programmes**.

Technical advice is offered only by the personnel of the Association, a zootechnician and a technician for milk recording (for the flocks that are in the program), local veterinarians or zootechnicians who are in the market of supplies (feeding, health issues etc).



# Results from the survey

## Dairy products



# Results from the survey

## Meat production

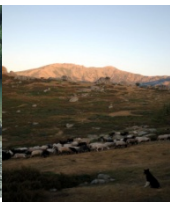
The main product is the **lamb / kid**. Two main channels are described; the majority of the production is directed to the market through the wholesaler, while the remaining is sold directly to the consumer, or is self consummated.

Few farmers reported that they are satisfied with the **meat price**, and also in these cases they are satisfied with the prices they receive by direct selling, while it is generally admitted that the prices are not satisfying.

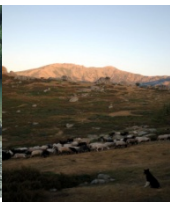
There are several **slaughter houses**, but only few are operating.  
The live weight of the lambs is around 14 kg, with a carcass weight around 8 kg.



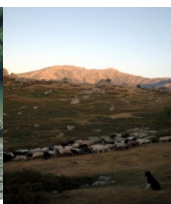








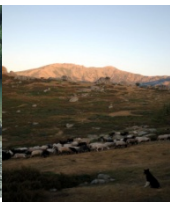




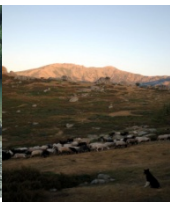








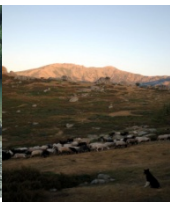




































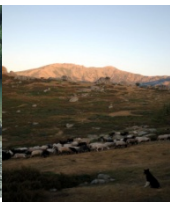




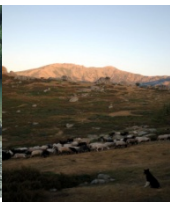












# Main conclusions

## The common problems in areas under study are:

- Aging of farmers and lack of motives for the return and installation of young farmers;
- Climate change and depletion of natural resources;
- Lack of rational management of pastures;
- Not sufficient development of breeding programmes for the local breeds, lack of collective organization;
- Gaps in infrastructures and application of modern technology (i.e. hand milking);
- Difficulties in access to the markets (i.e. In transfers);
- Gaps on information and training of farmers/cheesemakers (health aspects, management practices, etc);
- Lack of projects for the promotion of traditional, typical projects.







*Thank you for your hospitality!*

