



# Pasture-based farming & sheep breed & new cheese types



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### 1 Description of the innovation



The farm 'Sa Mura Bianca' is located in North Sardinia (Italy). The main adopted innovations are:

#### 1. Exclusive use of natural permanent pastures

The farmer decided to abandon the cultivation of annual crops, that were traditionally sown by his father. He restored semi-natural pastures with wild species where once annual forage crops and cereals were cultivated. No fertilisation is applied to soils. Sheep graze also on wooded pastures where holm oak is present and eat acorns. Sheep graze in plots for 4-5 days, then they are moved to the nearby plots. The use of natural pastures improved milk and cheese quality, lowering labour intensity and production costs.

2. Sheep breed. The farmer is interbreeding the Sarda breed with a Sardinian breed ('Pecora Nera di Arbus') to increase the adaptability and rusticity of Sarda sheep.

3. Development of new cheese types. Sheep milk is entirely processed into cheese in the farm. The farmer introduced new techniques in cheese processing: use of microbial rennet, cheese maturation under straw, production of pecorino cheese flavoured with Sardinian truffles. The farmer also produces the traditional Sardinian yogurt ('Gioddu'), fresh ricotta, salty and roasted ricotta, and a special type of cheese that resembles ricotta ('cacioricotta'). All cheese is produced from raw milk.



#### Reason for the innovation

- Reduction of milk cost production
- Reduction of labour intensity
- Increase farmer income
- Offer high quality and healthy products to consumers



Better milk quality

Higher cheese yield per volume of milk



## 2 Farm description

### ENVIRONMENT

**Soil types:** clay soils, acidic pH

**Climate:** Mediterranean climate

**Altitude:** 450-500 m a.s.l.

**Slope:** 10-35%

### GRASSLAND MANAGEMENT

**Grazing :** Yes

**Grazing management type:** rotational grazing

**Length of the grazing season:** 12 months

**Forage conservation type:** Hay

**Fertilisation rate:** 0

### FARM STRUCTURE

**Annual Work Unit:** 1 worker

**Agricultural Area:** 120 ha. All the farm area is covered by natural and semi-natural rainfed permanent pastures, and partly, with cork oak scattered trees:

- 36 ha, wooded pastures

- 84 ha, semi-natural pastures

**Activity:** dairy sheep raising (Sarda breed crossbred with Pecora nera di Arbus breed)

**Number of heads (LSU):** 40

**Stocking rate referred to total farm area:** 0,23 LSU per hectare

### ANIMAL PERFORMANCE

**Milk production:** 240 l per head per year

**Meat production:** 250 milk lambs per year, slaughtered 28 days after birth (carcass weight: 6-7 kg)

### WHY IT IS WORKING

The farmer is very motivated in producing milk and cheese in a natural way. He is proud to produce innovative high quality products and he is very respectful of his customers.

The farmer is determined to innovate products to find new consumers and markets to maximize the added value of cheese.

The farmer has loyal customers in a farm-to-fork market (Coldiretti Campagna Amica).

## Country shapes



## Domains of innovation



Machinery, tools



Forage mixture



Forage conservation technique



Grazing management system



Legume management



Animal feeding management



Animal type (breed)



Product processing



Marketing



Farm system



Landscape

## Main types of animal

