



Introduction of durum wheat for double use & new cheese types



Manca family

1 Description of the innovation



The farm 'Montentosu' of Manca family is located in the North West Sardinia Island (Italy).

The main innovations that can be found in the farm are the following:

1. Grazing of dairy sheep on durum wheat var. Cappelli

Durum wheat is cultivated in the farm because it is used to produce pasta and bread in the farmers' holiday farm. The adopted seed rate of durum wheat is below the usual seed rate of cereals in the area. Sheep graze on durum wheat up to the end of March. Sheep grazing favours the development of a higher number of spikes and a higher grain production. At the same time, wheat produces abundant winter forage thanks to the high tillering and re-growth rate.



2. New cheese types

Milk produced in the farm (sheep milk, goat milk, cow milk) is partially used on farm to produce unique cheese types (semi-seasoned cheese based on sheep-goat-cow milk; semi-seasoned cheese produced with piglet rennet; cheese produced with thistle rennet; 'fossa cheese' produced in cooperation with a producer located in the Italian Peninsula).



Reason for the innovation

- Increase farmers income
- Develop new products with new taste
- Increase the potential number of consumers, including vegetarians

Products for consumers with different styles of consumption

Grazing on cereals allows higher cereal yields



2 Farm description

ENVIRONMENT

Soil types: clay soils, pH < 7

Climate: Mediterranean climate

Altitude: 480-500 m a.s.l.

Slope: 10-15%

GRASSLAND MANAGEMENT

Grazing : Yes, on annual cereals and legume-based mixtures

Grazing management type: part time rotational grazing on cereals up to the end of March (5 hours per day) and part time rotational grazing on forage mixtures (1 hour per day) only for lactating sheep.

Length of the grazing season: 12 months

Forage conservation type: Hay

Fertilisation rate: 50 kg ha⁻¹ of diammonium phosphate

FARM STRUCTURE

Annual Work Units: 5 full time and 5 seasonal workers (6 months per year)

Agricultural Area : 180 ha UAA

3 ha, wooded pasture

75 ha, cereals

90 ha, legume-based mixtures (clovers -oat)

18 ha, natural permanent pastures

Activity: milk production from sheep (Sarda breed) and goat (Saanen breed) and cow (Pezzata Rossa breed)

Number of heads (LSU): 79

Stocking rate referred to total farm area: 0,425 LSU per hectare

ANIMAL PERFORMANCE

Milk production: 350-380 l per head per year for sheep, 885 l per head per year for goats, 6000 l per head per year for cows

Meat production: 300 milk lambs and 600 milk goats per year, slaughtered 28 days after birth (carcass weight: 6-7 kg)

WHY IT IS WORKING

The farmers:

- found a synergy between animal breeding and cereal grain production
- manage a holiday farm and this helps them to sell cheese
- are very interested in innovations that allow the differentiation of products and income increase
- rely on external technicians and consultants to learn new techniques and develop new products

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

