

# Idiazabal Cheese: A product linked to the land

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**EAAP**

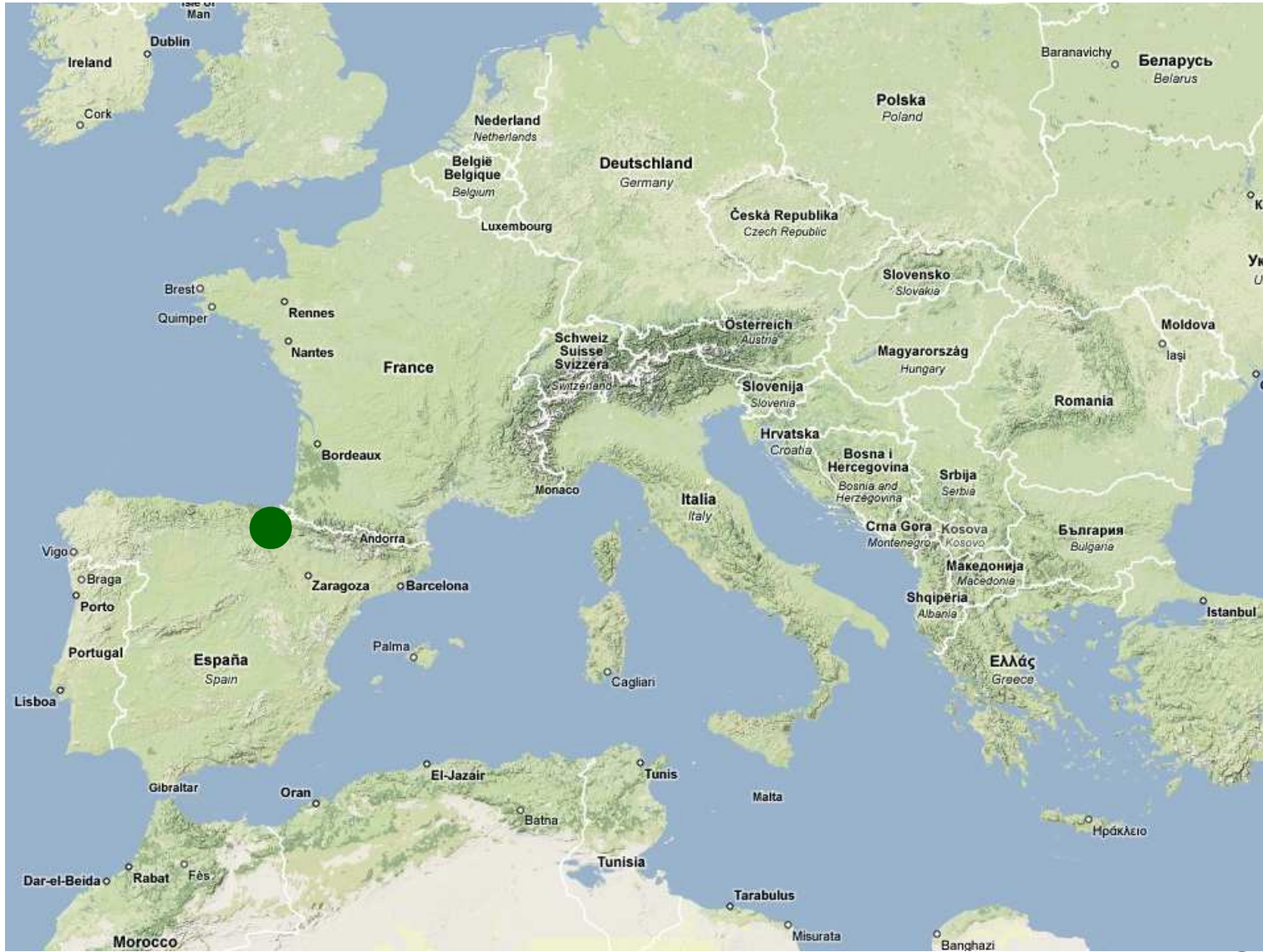
European Federation of Animal Science

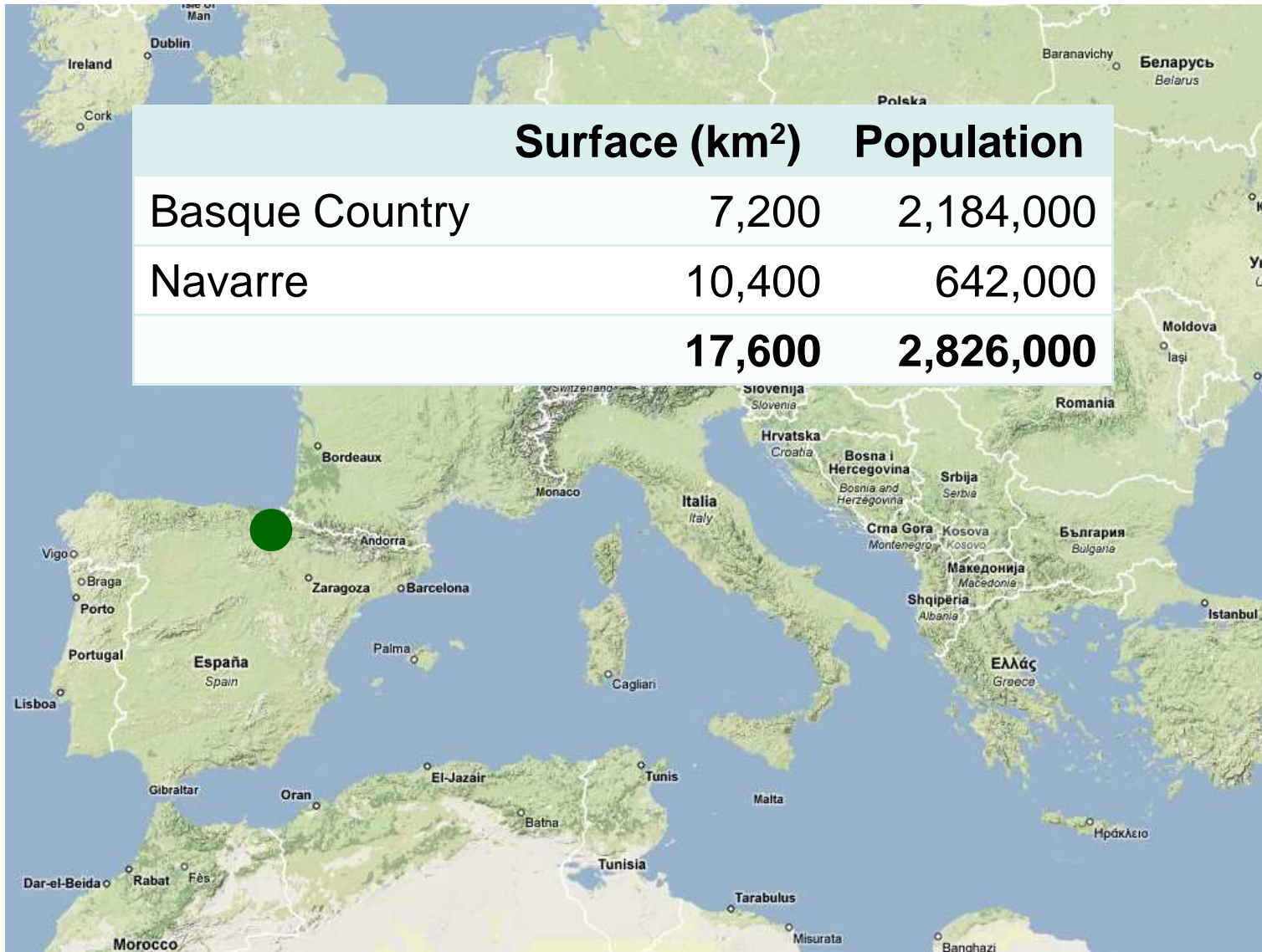


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# Outline

- Introduction:
    - Location & Sheep population
    - The Product: Sheep Cheese
  - Protection Denomination of Origen “Idiazabal” Cheese
    - Objective
    - Functions
    - Organizational Structure
    - Financial aspects
    - Innovation aspects
  - Results
  - Conclusions
-





## Local Sheep Breeds



# Geographical distribution of local sheep breeds



**CARRANZANA**

**LATXA BLONDE FACED**



**LATXA BLACK FACED (BC)**



**LATXA BLACK FACED (NA)**



## Sheep population

|                         | Basque Country |              | Navarre        |              |
|-------------------------|----------------|--------------|----------------|--------------|
|                         | Sheep          | Flocks       | Sheep          | Flocks       |
| Latxa Blonde Faced      | 100,088        | 2,461        | 70,414         | 466          |
| Latxa Black Faced       | 147,207        | 3,503        | 100,088        | 985          |
| Carranzana Blonde Faced | 10,720         | 601          |                |              |
| Carranzana Black Faced  | 250            | 5            |                |              |
| Total                   | <b>258,265</b> | <b>6,570</b> | <b>170,502</b> | <b>1,451</b> |

## Breed characteristics

- Live Weight: ♀ 50 - 65 kg  
♂ 75 - 90 kg
- Rusticity:
  - Very well adapted to local conditions
  - Seasonal reproductive pattern
- Breeding program (since 1982)
  - Based on pure breed selection
  - Production traits: milk yield and composition
  - Functional traits: Udder morphology





## Breed characteristics

-Productive level

-Prolificacy: 1.1 - 1.4 lambs

-Lactation length: 163 days

-Milk yield: Total = 197 litres

Milked = 163 litres





## The Product: Main Features



- Aged cheese
  - Ripening > 2 months
- Whole Raw milk (non pasteurized)
- Pressed paste
- Enzymatic coagulation
  - Lamb rennet
- Weight: 1-3 kg.
- Smoked / not smoked

## Regulatory Council PDO

Since 1987 ...



<http://www.doidiazabal.com/>

# Regulatory Council PDO

- Objectives
  - Keep a traditional product linked to the territory through the local breeds and production system based in the use of natural resources

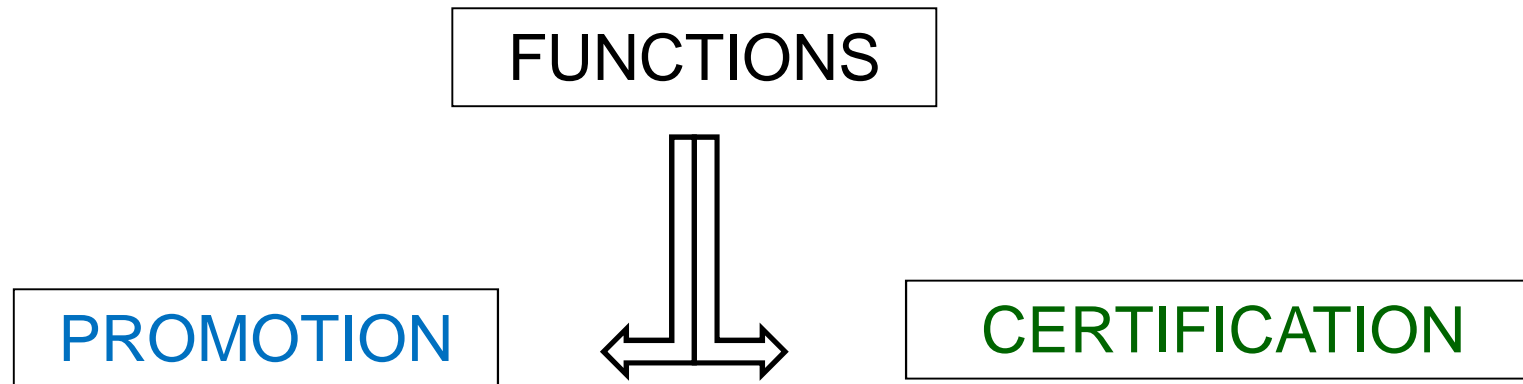
Positive externalities

- To promote the product, improve the commercialization and introduction to the market

Product differentiation



## Regulatory council PDO: Functions



- Livest. farming system
- Product & procedures
- Label

- Procedure rules
- Quality controls

## PDO: Promotion functions

- Traditional farming systems:
  - Local Breeds: Latxa and Carranzana
    - Feeding system: pasture based & grazing
  - Geographical production area
    - Basque Country and Navarre
- the adoption of practices and techniques aiming to increase the productivity of the flocks
- The quality of the milk and cheese
- Training and education activities
- R+D activities

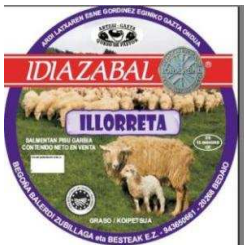
## PDO: certification functions



1988: Red Label

Number





# PDO: certification functions



**1988: Label**

**1992: Casein plate**  
Traceability



**2008: hologram label - counter label**

Certification: higher security standards

# PDO: certification functions

## 1. Inspection

- **What:** Checklist with farming and transformation conditions
- **Who:** HAZI Certification (accredited, 171020)
- **When**
  - a) Cheese producers: all > once / year
  - b) Milk producers: some and sometimes
  - c) Sales points: randomly

### Farms and Cheese-makers:

Sheep breeds  
Facilities  
Procedures  
Sanitary and hygienic conditions  
identification of batches ...

### Sales points (shops, markets, supermarkets, etc.)

Utilisation of the label  
Conditions of the cheese ...

### 2. Administrative Control: trace and check records

- **Data sources**

- Flock size official records
- Farmer: Monthly sold milk records
- Industry: Monthly purchased milk records
- Cheese production records. Stocks available.

- **Five levels of control**

1. Average milk yield per sheep (per year)  
Flock size (number of sheep) - Milk produced per farm
2. Litres of milk produced/sold per farm – Litres of milk purchased by industry
3. Litres of milk prod. / purchased – litres transformed into cheese
4. Total milk prod. / purchased - Kg of cheese certified
5. Number of cheeses – number of labels, casein plates and hologram labels

### **3. Analytical procedures**

a) Physical-chemical & microbiological analysis :

**Lactological Lab. of Lekunberri**

≥ once / cheese-maker / year

b) Sensorial analysis:

**Lab. of Sensorial analysis, Univ. Basque Country**

≥ 3 times / cheese-maker / year



# PDO: sensorial analysis

## 1. Shape

- Cylindrical: Height=8-12cm; diameter=10-30 cm.
- Weight: 1-3 kg.
- Rounded or edged corners (depending on size)
- Flat face; heel slightly convex

## 2. Rind

- Hard and flat
- Homogeneous colour (from pale yellow, gray-white, to dark brown)
- With slight signs of the wiper used

## 3. Paste Colour

- Dull & Homogeneous
- From ivory to pale yellow

## 4. Eyes

- Scarce and randomly distributed
- Irregular shape
- Very small (smaller than a rice grain)
- No cracks



### 5. Texture

- Medium elasticity
- Medium firmness
- Medium granularity

### 6. Flavour

- Very specific:
  - Mature sheep milk
  - Slight taste of natural rennet
  - Clean, consistent and penetrating
- Slightly spicy
- No bitterness
- Medium intensity salted
- Smoked: medium intensity to smoke

### 7. Aftertaste

- Continuous
- Persistent
- Pronounced



## PDO: sensorial panel

**Externally accredited method (ENAC, n° 472/LE1020)**

**Compulsory to be certified under PDO**

**Reasons:**

Assure differentiated characteristics of Idiazabal  
PDO Cheese

Fraud detection

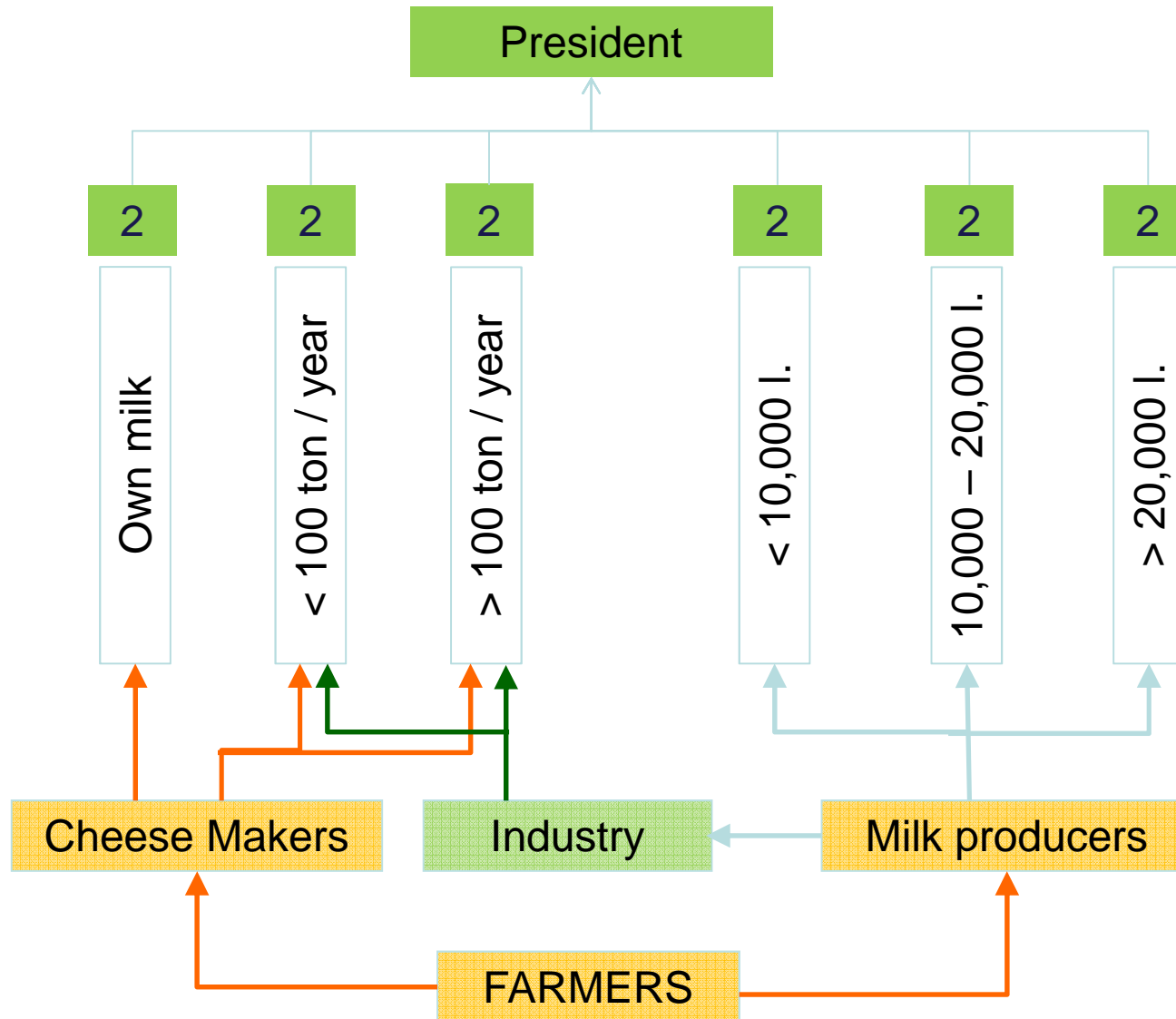
Improve cheese quality



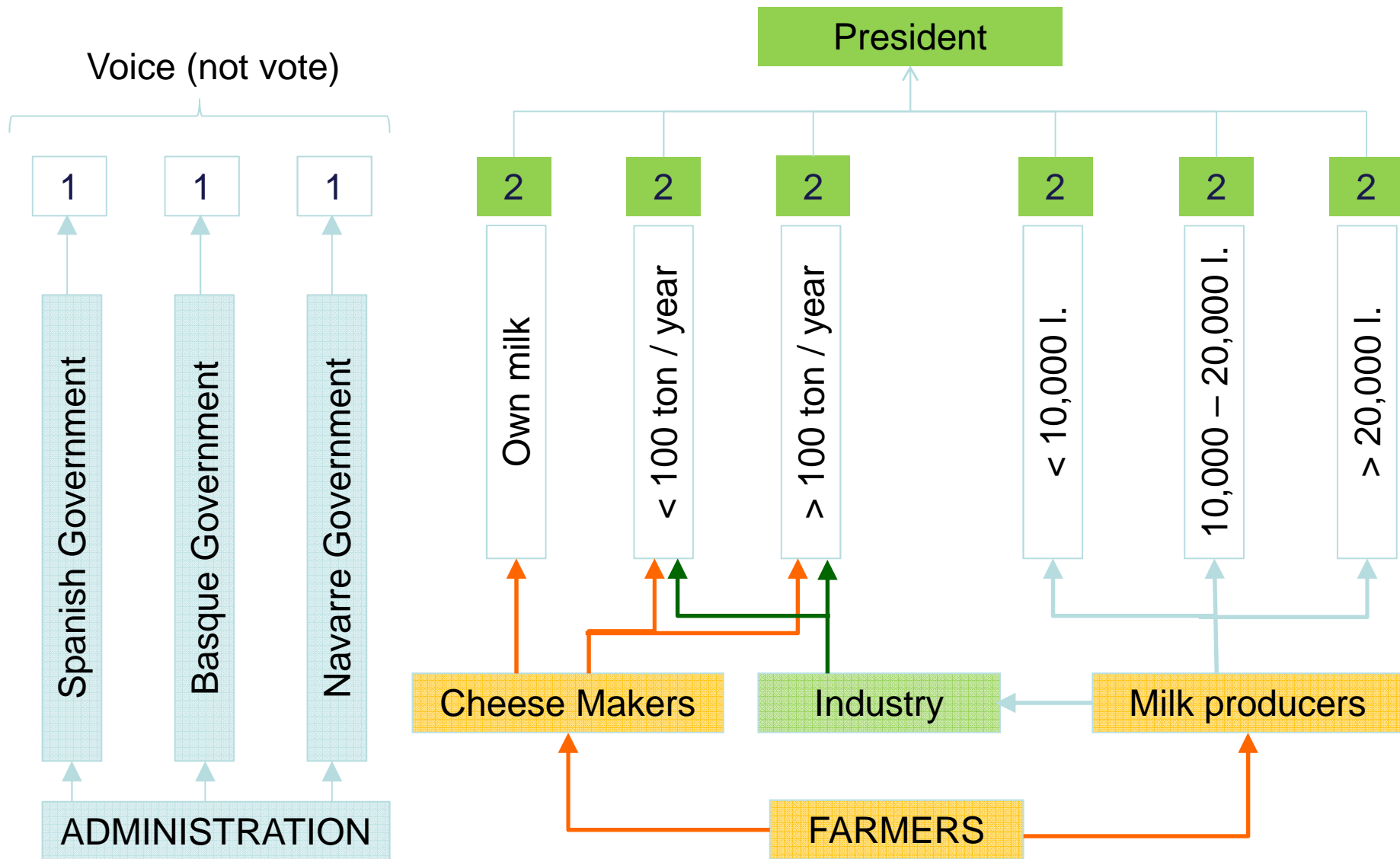
## PDO: Innovation aspects

- Accreditation of certification procedures:
  - including sensorial analysis
- Casein plate: traceability
- Counter label: higher security standards
- Research agreements:
  - detection in cheese of milk produced by other sheep breeds
  - Use of autochthonous starters
  - Transformation process (to eliminate some faults)

# Regulatory Council - Composition



# Regulatory Council - Composition



## Regulatory Council - Composition

- Human Resources
  - 1 general manager
  - 2 administrative



## PDO: Financing

- **50% = farmers (parafiscal taxes or levies)**
  - Milk producers:
    - 1% of price milk = 0,006 €/l
  - Cheese makers:
    - 1 % of cheese price = 0.026 €/l (updated annually)
    - Twice the price of the counter-label (label + management costs)
- **50% = Administration Support**
  - Basque Government
  - Navarre Government
  - Spanish Ministry

# RESULTS: IMPACT OF THE P.D.O.

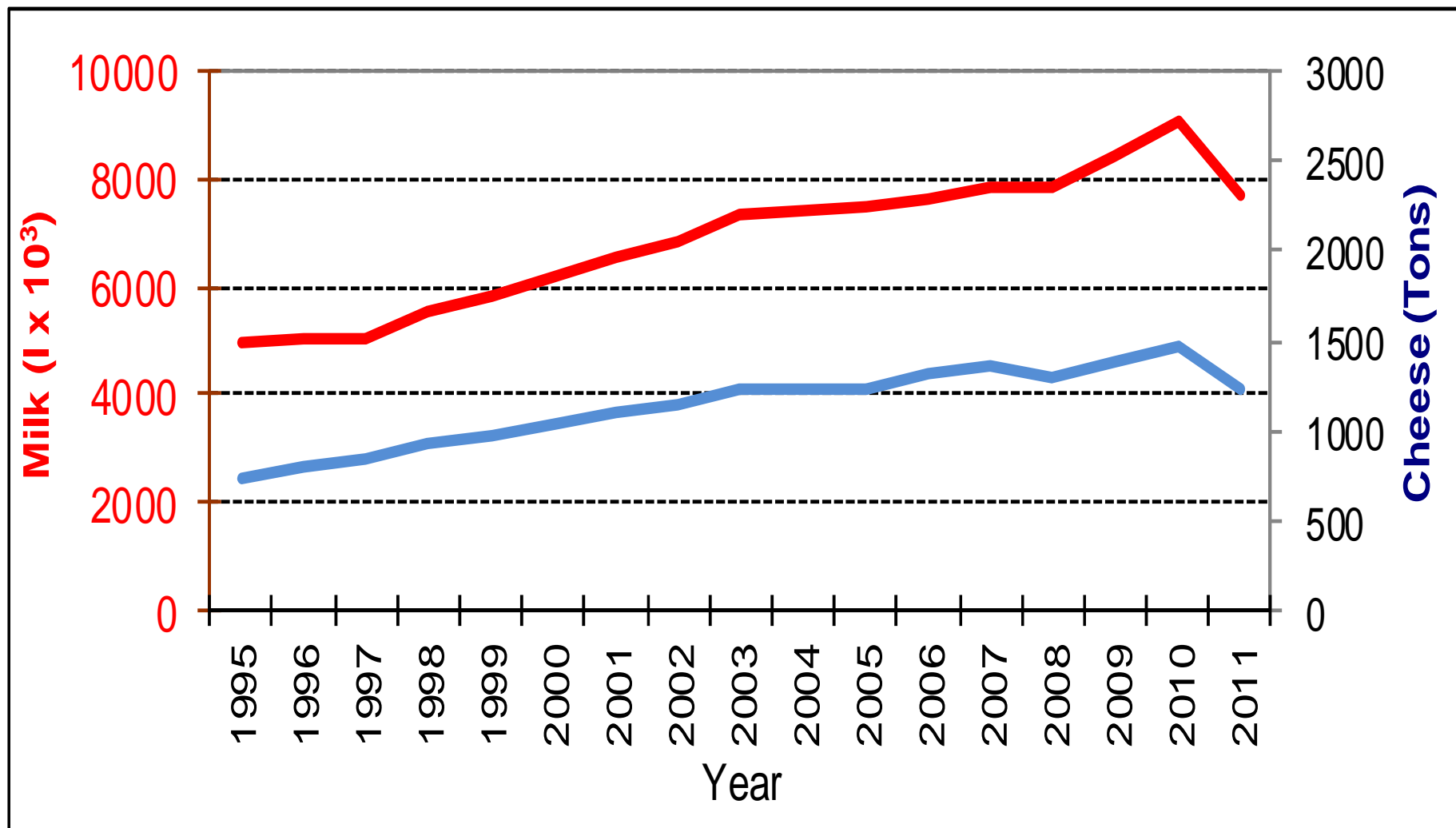


## Sheep breeds

- Dairy Sheep:
  - **86.5%** Local Breeds:
  - **1.5%** Foreign Breeds
    - Assaf (95% of FB)
- Meat Sheep:
  - 6.6% pure breeds
  - 5.4% Crossbreeds

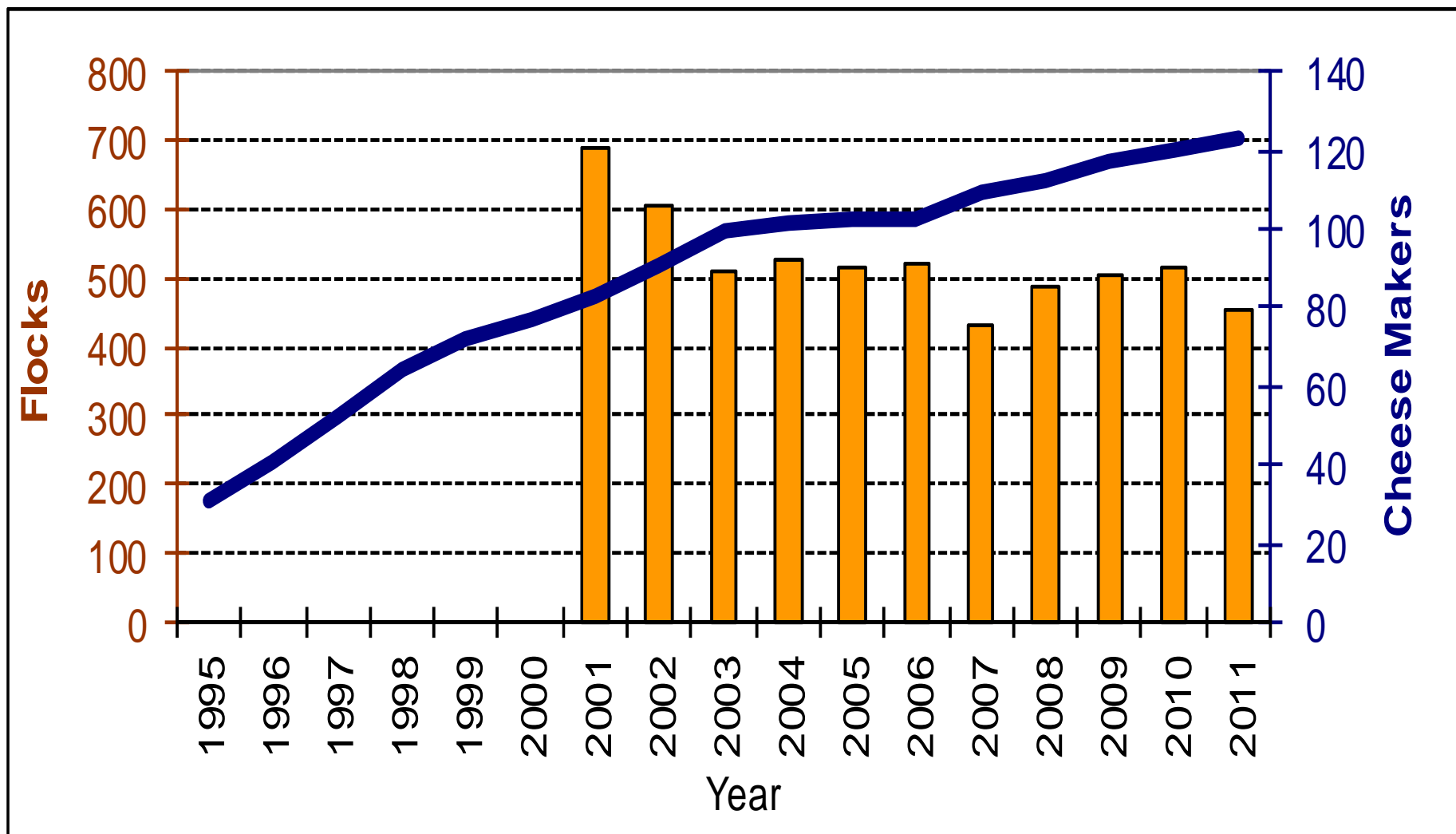


## Milk and cheese production



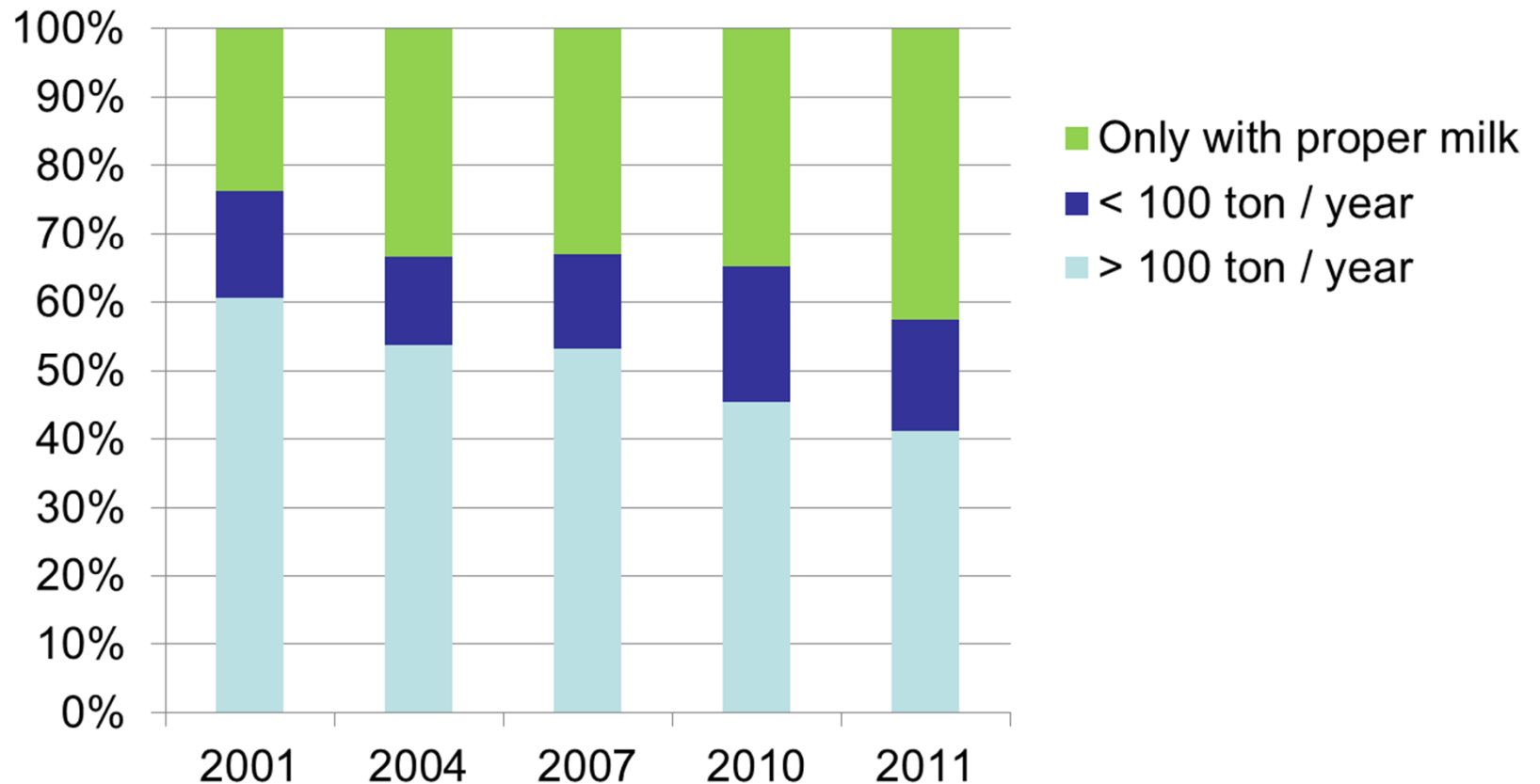


## Number of flocks and cheese makers



## Home made vs industrial cheese

| Type of Cheese Producer | 2001  | 2004  | 2007  | 2010  | 2011  |
|-------------------------|-------|-------|-------|-------|-------|
| > 100 ton / year        | 60.50 | 53.69 | 53.13 | 45.36 | 41.22 |
| < 100 ton / year        | 15.86 | 12.81 | 13.89 | 19.84 | 16.10 |
| Only with proper milk   | 23.64 | 33.50 | 32.98 | 34.80 | 42.67 |



## Milk vs. Cheese

- Economical assessment show that on farm cheese-making **can be crucial** to assure the profitability of Latxa breed dairy sheep flocks ...



... + Productivity + Efficiency + Marketing....

## Quality acknowledge

- International Prestige

- 1992. “European Food Heritage Product”
- 1993. International Academy of Gastronomy: “Gold Medal” = IDIAZABAL top-quality cheese.
- World Cheese Awards:
  - 2008: 26 medals (6 gold)
  - 2009: 28 medals (11 gold)
  - 2010: 41 medals (12 gold; 2 super-gold)
  - 2011: 44 medals (7 gold, 2 super-gold)

- Differentiated types

- Black, Green, Organic



## Conclusions

- PDO: Essential to maintain the breed and production system
  - Price perceived by milk producers within the PDO are paid +30 cts / litre (  $\approx$  1 €/l.) in comparison to non differentiated milk (  $\approx$  0.7 € l.)
- Efficient barrier to introduction of foreign breeds
- High quality product and prestige
- Challenges to be faced



Many Thanks !

