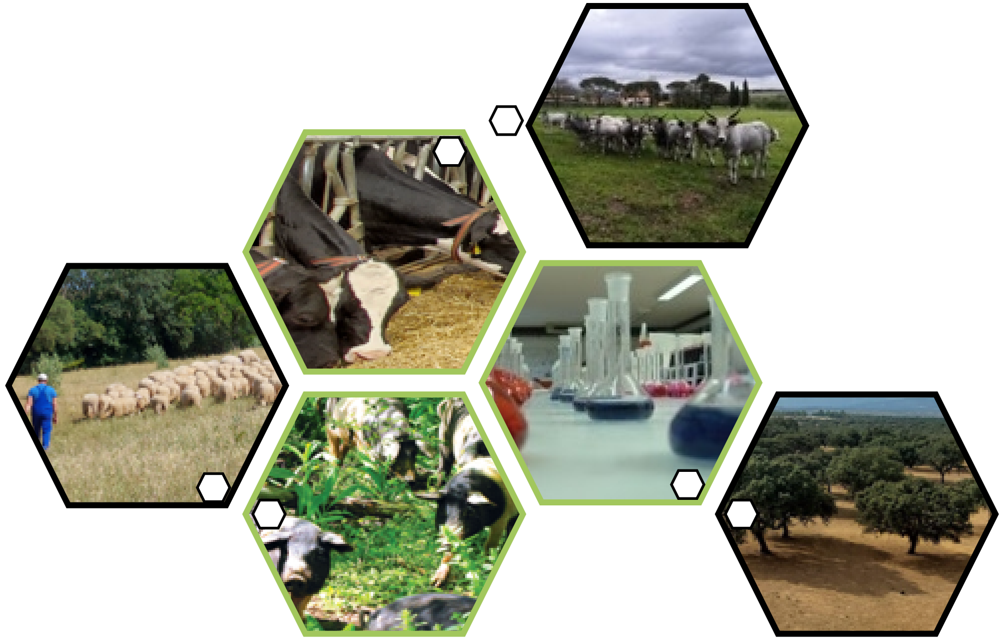
EAAP - WAAP - Interbull Congress 2023

Lyon, France - August 26th / September 1st, 2023

Mapping of value chains in the Italian bovine sector



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PLAS TEAM

Pisa Livestock farming, Animal food quality, and Sustainability

About PATHWAYS Project

Horizon 2020 project with the following **Objectives**:

- To develop innovative holistic sustainability assessment methodologies to enable livestock systems assessment from farm to fork
- To identify and evaluate innovations within livestock systems through practice hubs and stakeholder engagement
- To co-design scenarios and associated transition pathways with multi actors for a sustainable European livestock sector
- To support a timely effective transition to sustainable livestock systems in Europe

The aim of our work inside *PATWAYS* Project

- **Mapping** the value chain of beef and dairy cows in Italy
- Understand the general picture of **national production**, from farm to processing industry, distribution, and final consumption
- Identify the leverage points along the value chain to **promote sustainable transformation** in the Italian dairy and beef cattle sector.

Materials and method

1. **Data collection** for the structure of the chains in Italy
2. The analysis of the governance structure of dairy and beef cattle value chains in Italy was investigated through **surveys** and **semi-structured interview** with various actors of the chains aimed at describing the power dynamics.

Agricultural labour union
- 57 regional branches in Italy

Agricultural Cooperatives
- Dairy: 20 northern regions
- Beef: 10

Processing industries
- Dairy: 11
- Beef: 8

Retail trade
- 15

Online shop
- 7

Public authority
- 8

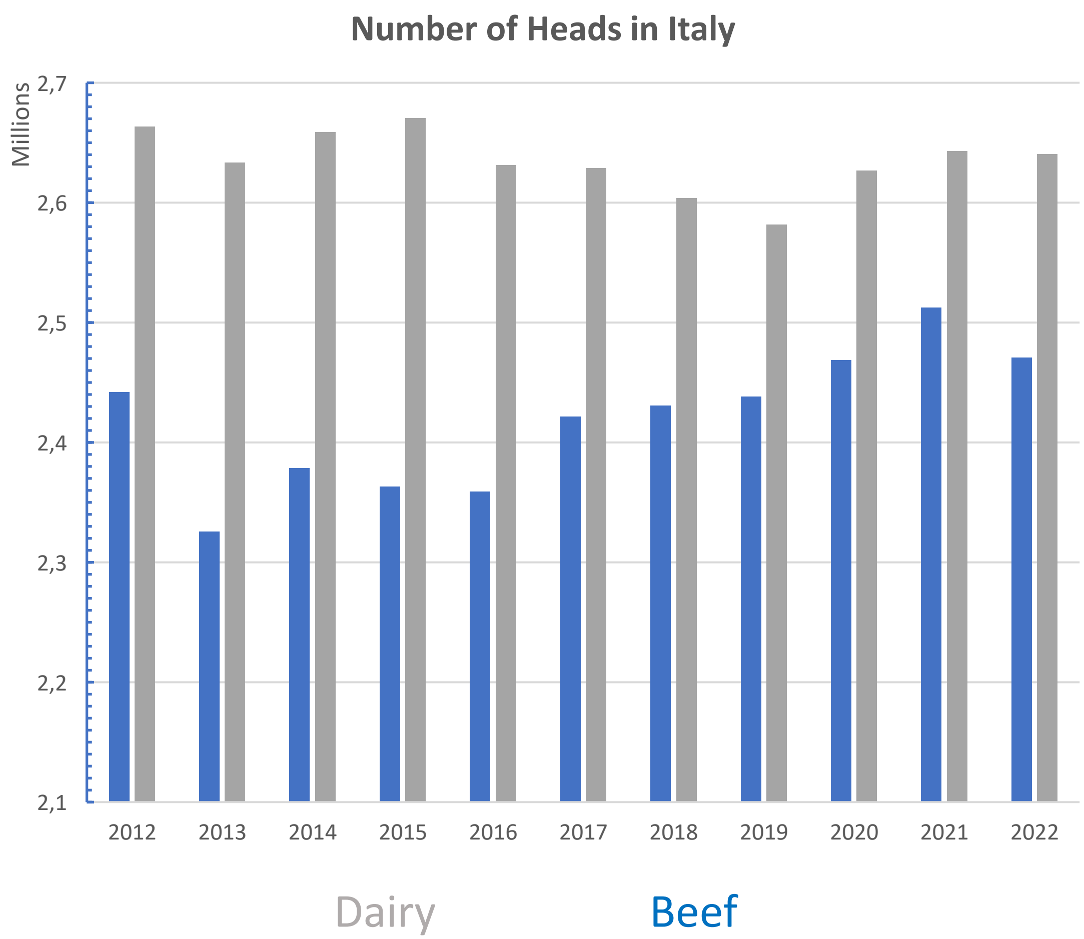
Researchers
- 300

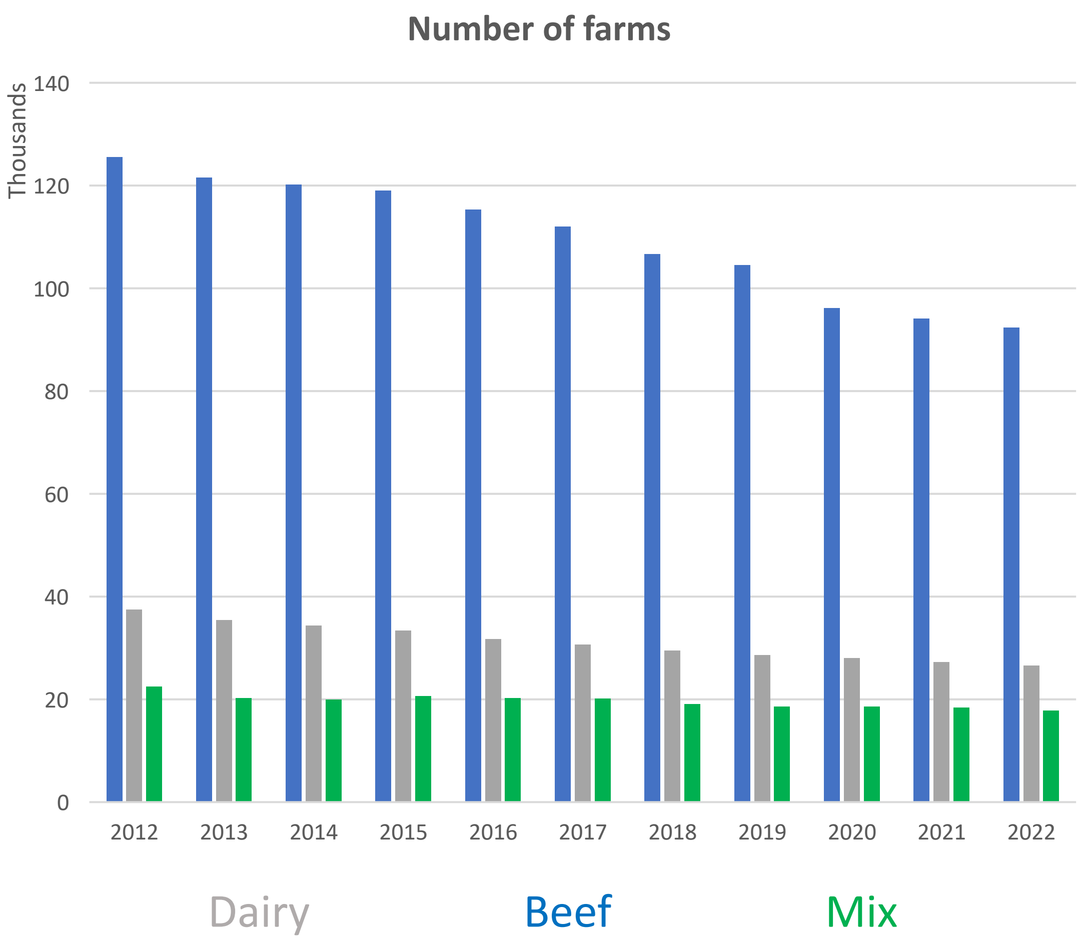
Association of Agronomy
- 35

INTERVIEW - SURVEY

470 Interviews through a survey software

Description of the physical flows in the value chain

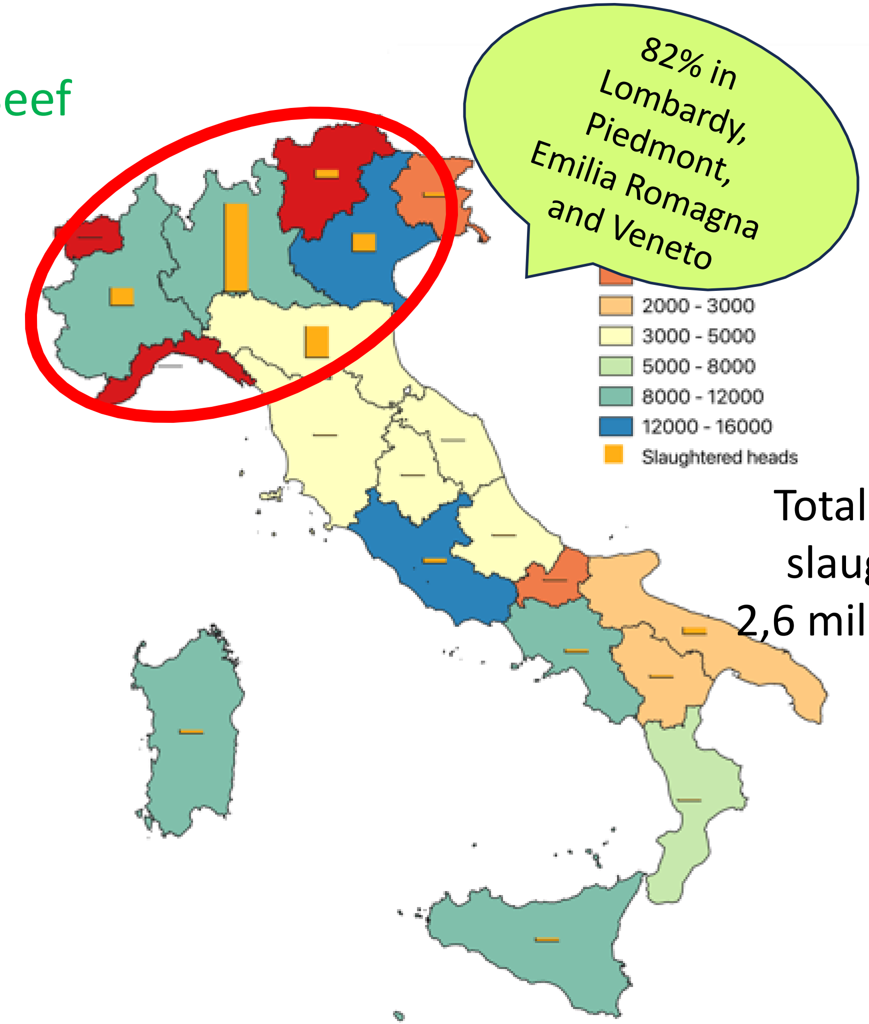




Source: Eurosta Data

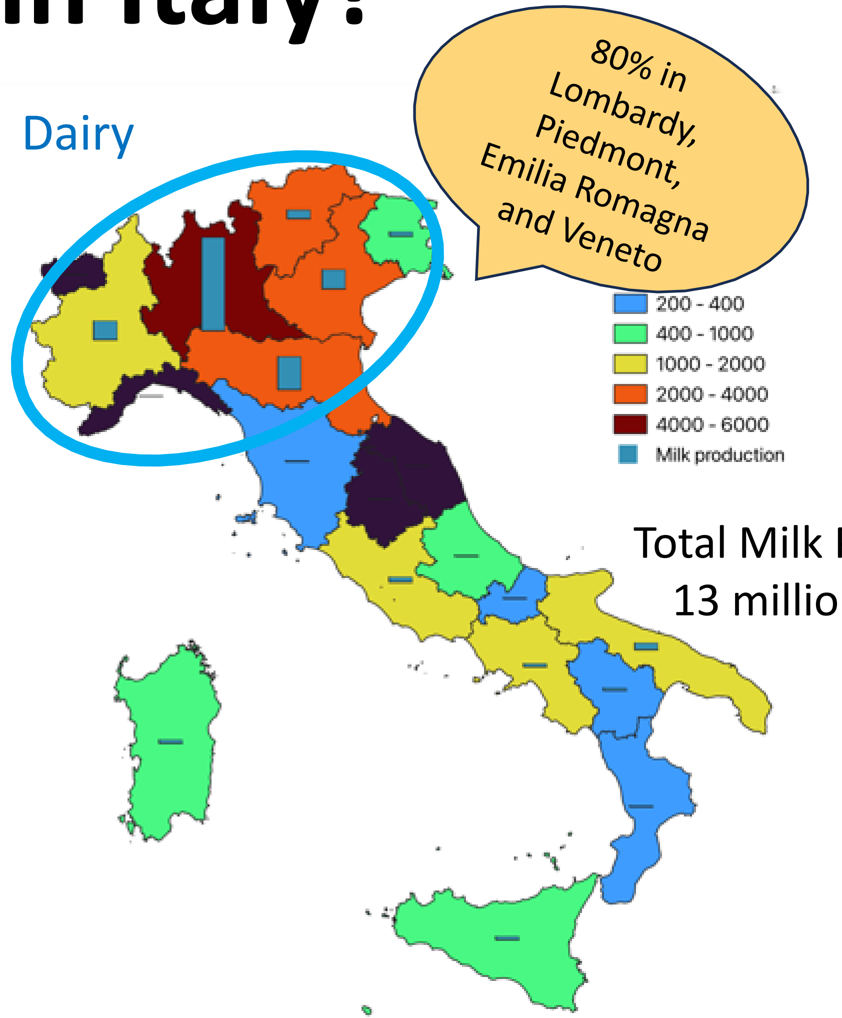
Where are the farms in Italy?

Beef

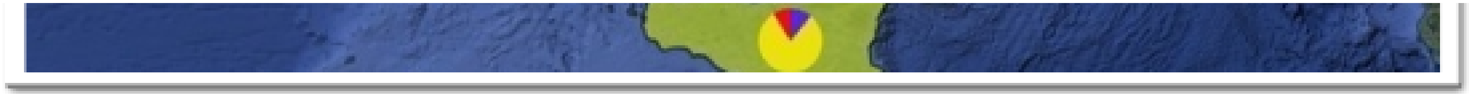


Total animals slaughtered 2,6 million heads

Dairy



Total Milk Production 13 million tonnes



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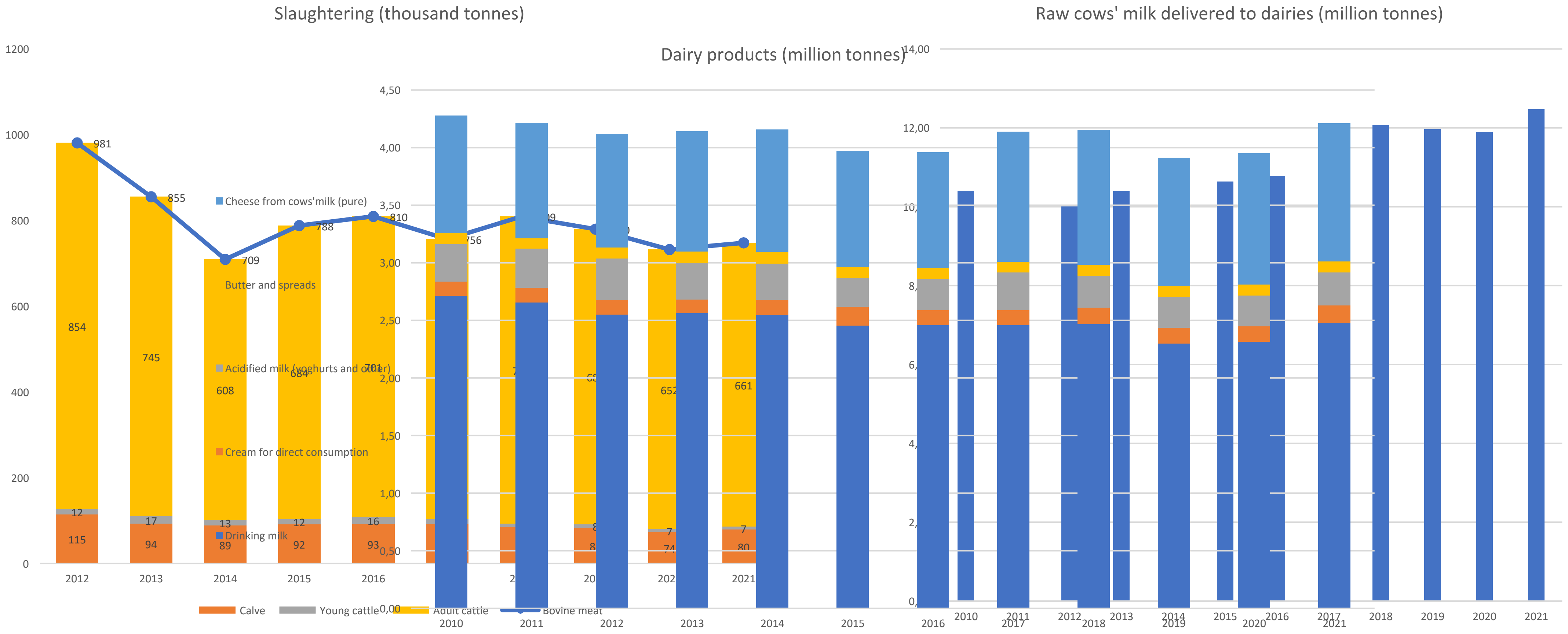
Meat and milk production



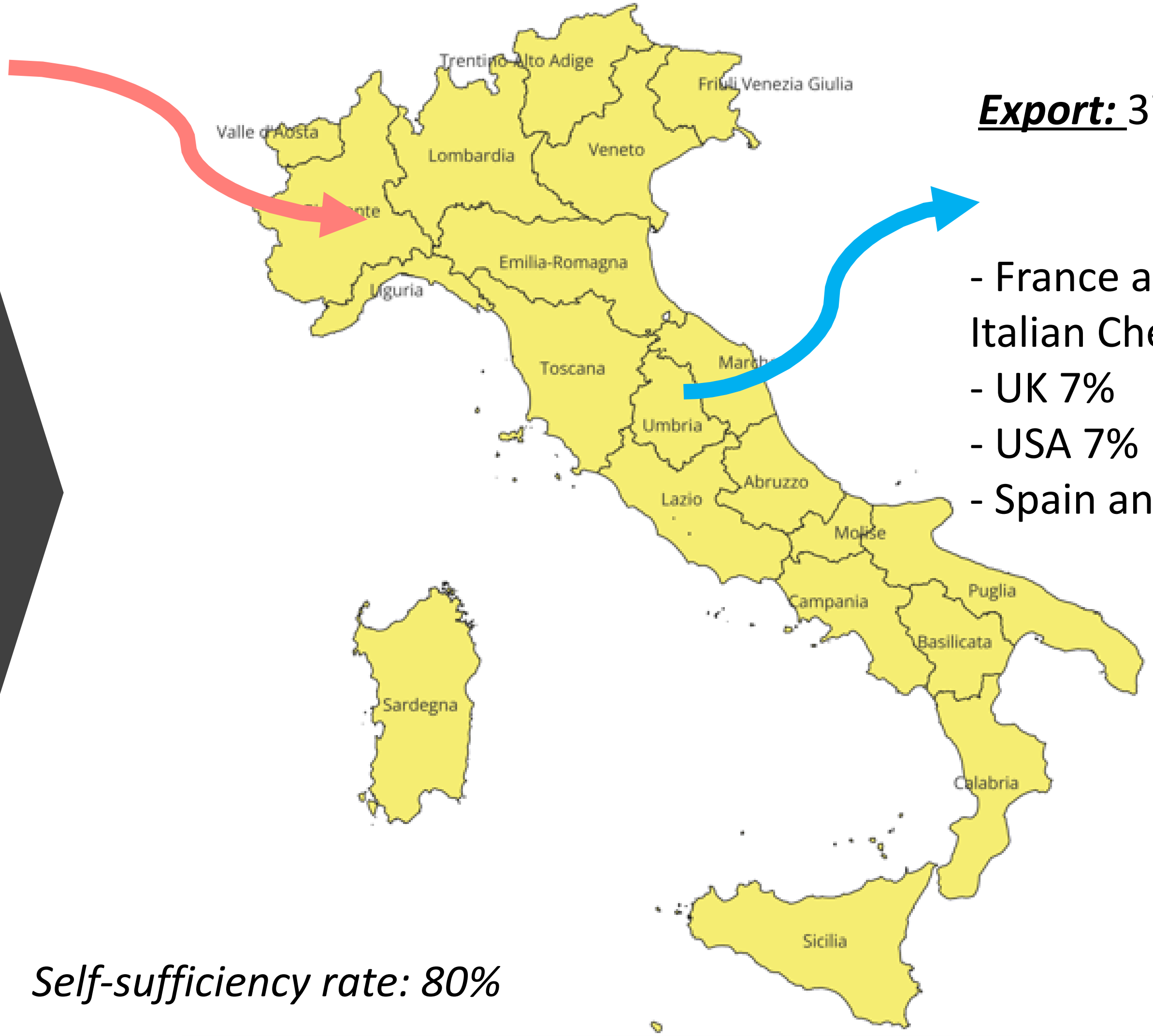
46% of milk is used to produce PDO and PGI products

Source: Eurosta Data

Import:

Milk 19% of production

Trade relation with other countries: *DAIRY sector*



Export: 37% are PDO products… Where??

- France and Germany 43% of Italian Cheeses
- UK 7%
- USA 7%
- Spain and Belgium 6%

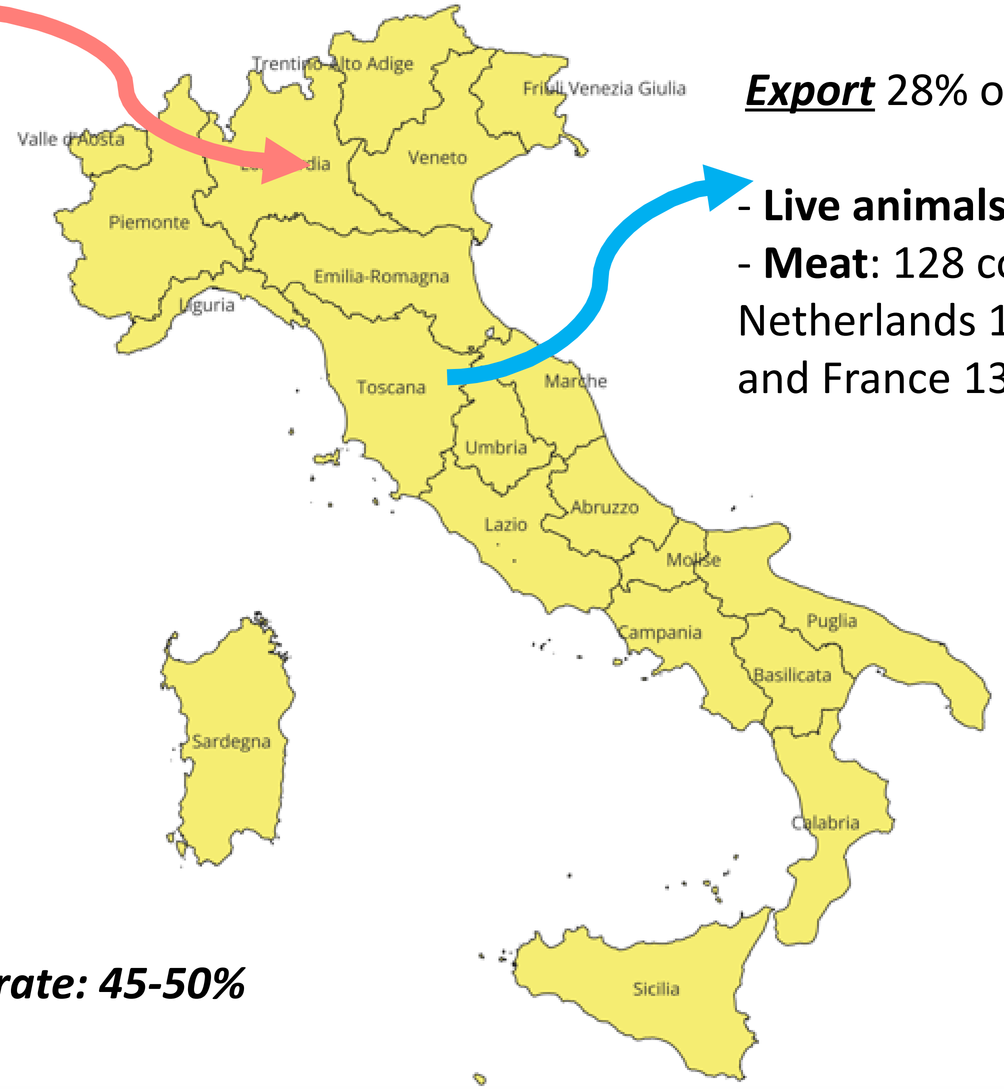
Self-sufficiency rate: 80%

Source: ISMEA, CREA, ISTAT, EUROSTAT

Import:

- **Live animals** (1million heads): >80% from France
- **Meat** (400 thousands tonnes): Poland 19% France 18% and Netherlands 16%

Trade relation with other countries: *BEEF sector*



Export 28% of meat production:

- **Live animals**: 85% Germany
- **Meat**: 128 countries – Netherlands 16%, Germany 15% and France 13%

Self-sufficiency rate: 45-50%

Source: ISMEA, CREA, ISTAT, EUROSTAT

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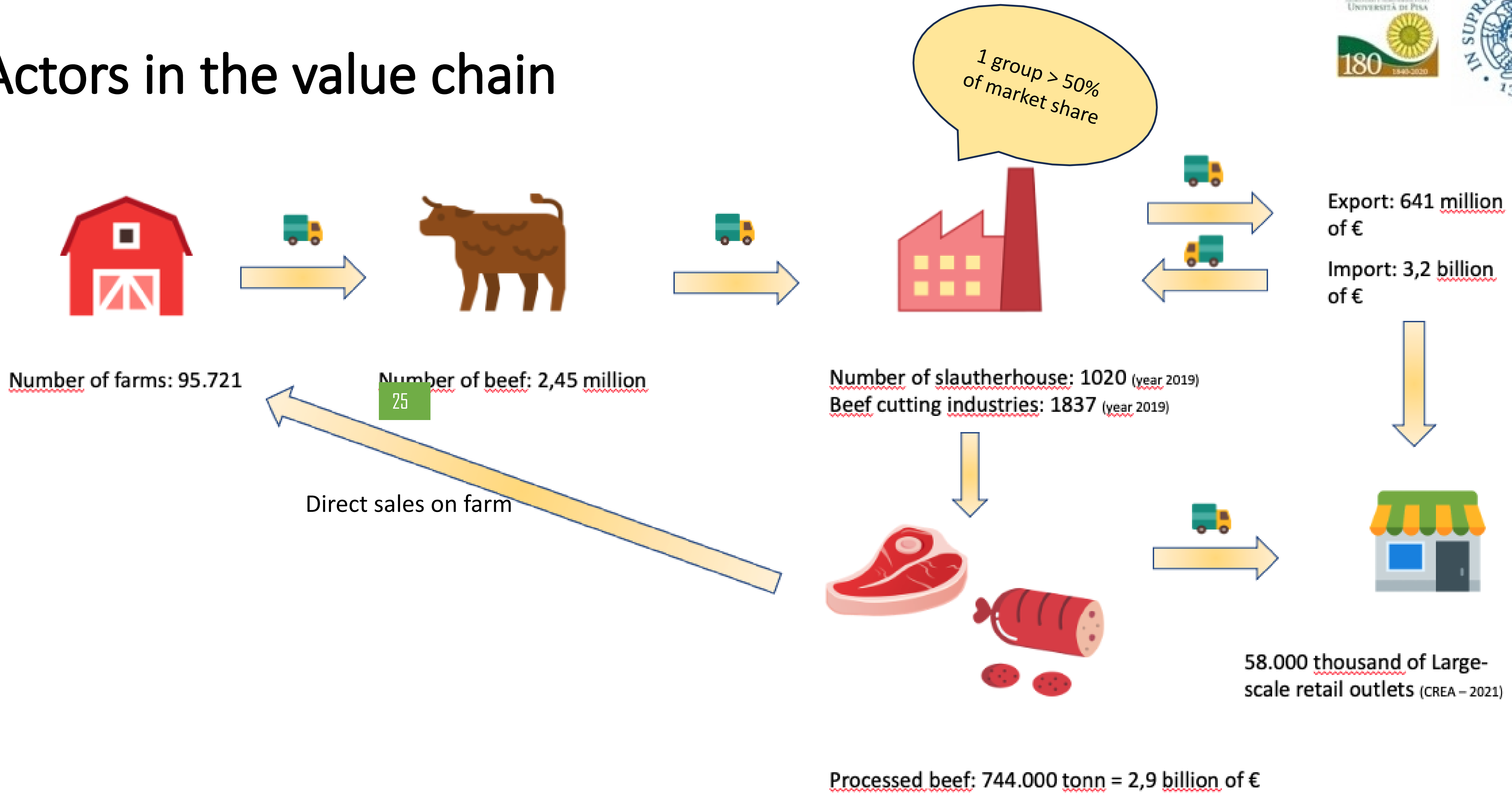
Actors in the value chain



are

Source: ISMEA, CREA, ISTAT, EUROSTAT

Results of Interviews

1	2	3	4	5
Actors with the greatest bargaining power	**Who is the main actor that determines the price formation**	**Who are the main actors in the supply chain**	**How many are the main processing industries**	**How agricultural policy influences price developments**
• 73% - Industries and retail sector • 21% - Consumers • 6% - Farmers	• 65% - Retail sector and industries • 18% farms cooperative • 12% politicians • Others	• Farms • Industries • Wholesalers • Supermarket	• Dairy: Lactalis, Newlat Granarolo > 60% of market share • Beef: Cremoni > 50% of market share	• 35% through indirect instruments of agricultural policy: farmers' association • 20% contract economy at fixed price • Others

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Power relations in the value chain

*Farmers: **more than 200.000***

*Cooperatives – Farmers associations: **few***

*Industries: **thousands***

*Big Industries: **3 for milk and 1 for beef***

*Retail sector: **5 big supermarket***

*Consumers: **tens of millions***

Bargaining power

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Strengths and weaknesses of the supply chain

1. **Hight quality production**
2. Maintenance of landscape with pasture
3. **the high competitiveness of the sector**

1. Low self-sufficiency
2. **Lack of farm structures**
3. High import of animals and meat
4. **lack of associations between breeders**
5. **Low bargaining power of farmers**

1. **High investments in farm structures**
2. **high levels of specialisation**
3. **Economic importance of the sector**
4. high associationism
5. Export

1. Existence of restrictive legislative constraints: animal welfare, wastewater management and nitrates
2. High production costs
3. **Strong territorial location**
4. Pulverization of the processing system
5. **Low bargaining power of farmers**

GHGs and Nitrogen…

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Conclusions

The Italian case study within the PATHWAYS project aims to set an example to European countries to develop future actions aimed at the environmental and economic sustainability of animal production.

1. Modelling for environmental impact assessment: **LCA Tier 2**
2. Further development of **producer groups** to increase the **bargaining power** of the agricultural phase
3. Working with industries to find solutions

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EAAP
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THANK YOU
FOR YOUR ATTENTION

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