

mEAT quality



**EUROPEAN RESEARCH PROJECT
2021-2025**



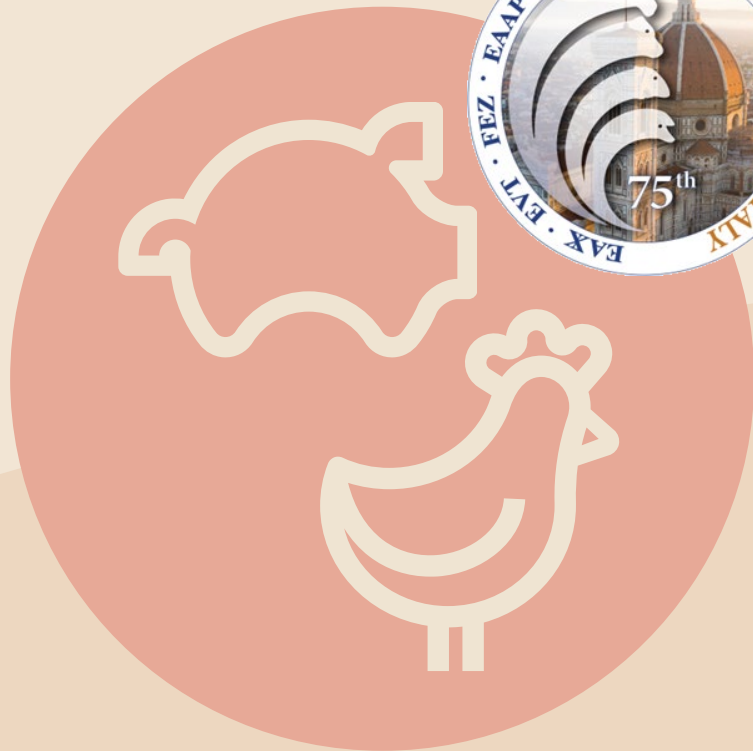
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Lorena Giglio

CRPA – Research center of Animal Production





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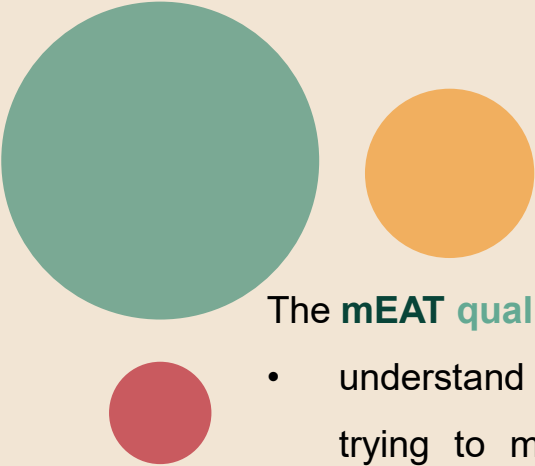


Building quality into animal products to improve the sustainability of farming systems for the future

Economic sustainability and resilience of extensiveness in fattening pig farms



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The **mEAT quality** project aims to:

- understand how to provide consumers with quality pork and poultry meat, trying to meet *social needs, environmental challenges* and *economic needs*.
- analyse the *extensiveness of production* as a key factor from the consumer's point of view;
- understand how 'extensiveness factors' can also be applied to other types of farming.





- Wageningen Research(coordinator)
- Wageningen University
- CLITRAVI
- MAREL Poultry B.V.



- Institute of Genetics and Animal Biotechnology
of the Polish Academy of Sciences
- Poznan University of Life Sciences



- Aarhus University
- Danish Technological Institut



- Research Centre for Animal Production
- Stazione Sperimentale per l'Industria
delle Conserve Alimentari



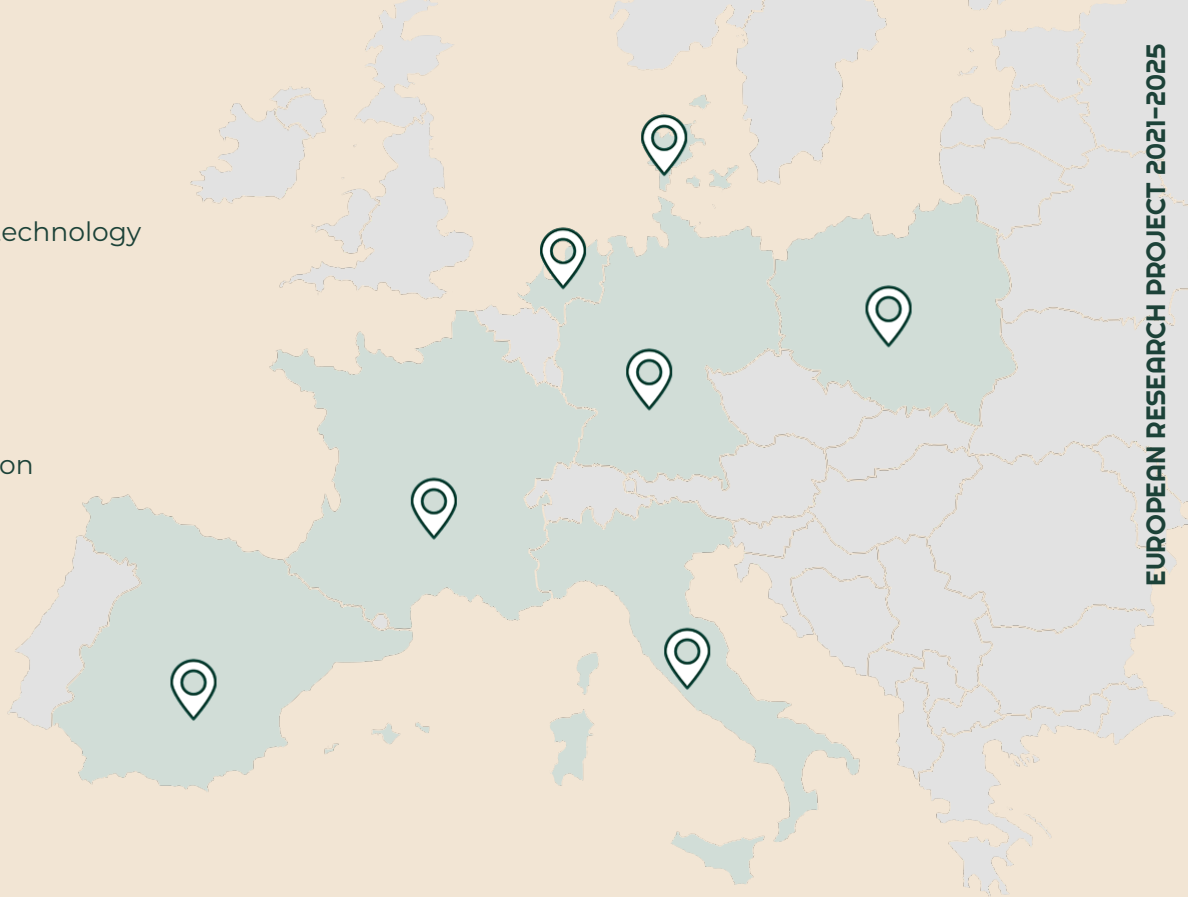
- Naturland
- Saarland University
- University of Rostock



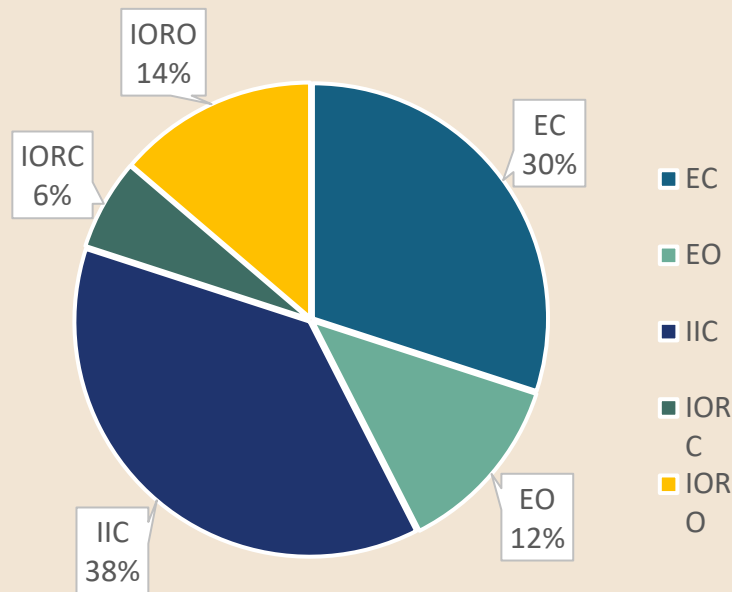
- ECOVALIA
- University of Salamanca
- University of Córdoba
- CARREFOUR



- HUBBARD S.A.S.



- **80 pig farms** under investigation.
- **Extensive farms** mainly in **Spain** and **Italy**;
- **Intensive livestock** farming predominantly in **Poland** and **Denmark**:
- The sample is distributed as follows:
 - *Extensive Conventional* (EC)
 - *Extensive Organic* (EO)
 - *Intensive, Conventional* (IIC)
 - *Intensive, Conventional outdoor access* (IORC)
 - *Intensive, Organic outdoor access* (IORO)



1.2 Steps in the analysis: the

STEP
01

Data collection on farms

STEP
02

Data processing and calculation
of production costs

STEP
03

Farmers' views on economic
resilience

STEP
04

Conclusions



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Innovative methodology

t

- Quality of entrepreneurship
- Resilience of resources
- Level of risk management
- Farmer's bargaining power in the supply chain
- Horizontal cooperation vs vertical integration
- Long term perspective

Economic protocol – preliminary results

At this point, we will focus on the second and third step data.

The next data are the results of an initial elaboration of the production costs, in order to validate the first conclusions.

The assessment of **economic and environmental sustainability** is in progress!

*It will be possible to see the definitive data in the article that will be published in 2025.

**The data presented today may be subject to change due to changing of data submitted by partner countries



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ID	PIGLETS REARING PIG €/kg l.w.	FEEDING COST €/kg l.w.	OTHER NON FACTOR COSTS €/kg l.w.	OVERHEAD COSTS €/kg l.w.	TOTAL LABOR COST €/kg l.w.	TOTAL COSTS €/kg l.w.
DENMARK*	1,12 €	0,82 €	0,09 €	0,36 €	0,10 €	2,46 €
IIC	0,63 €	0,61 €	0,05 €	0,11 €	0,06 €	1,47 €
IORC	1,07 €	0,78 €	0,16 €	0,48 €	0,11 €	2,55 €
IORO	1,65 €	1,08 €	0,05 €	0,49 €	0,13 €	3,36 €
ITALY*	0,83 €	1,60 €	0,23 €	0,12 €	0,75 €	3,49 €
EC	0,86 €	2,43 €	0,25 €	0,34 €	1,51 €	5,39 €
EO	0,88 €	1,60 €	0,51 €	0,04 €	1,18 €	4,21 €
IORC	0,57 €	1,14 €	0,06 €	0,05 €	0,10 €	1,92 €
IORO	1,00 €	1,25 €	0,10 €	0,04 €	0,23 €	2,46 €
POLAND*	0,88 €	1,15 €	0,71 €	0,18 €	0,31 €	2,97 €
IIC	0,88 €	1,15 €	0,71 €	0,18 €	0,31 €	2,97 €
SPAIN*	0,89 €	1,63 €	0,28 €	0,19 €	0,82 €	3,41 €
EC	1,41 €	1,70 €	0,38 €	0,28 €	1,93 €	4,83 €
EO	0,68 €	2,15 €	0,30 €	0,27 €	0,44 €	3,51 €
IORC	0,57 €	1,03 €	0,16 €	0,01 €	0,11 €	1,88 €

IIC – Intensive, conventional; IORC – Intensive, outdoor run, conventional, IORO – Intensive, outdoor run, organic, EO – Extensive, organic, EC-Extensive, conventional



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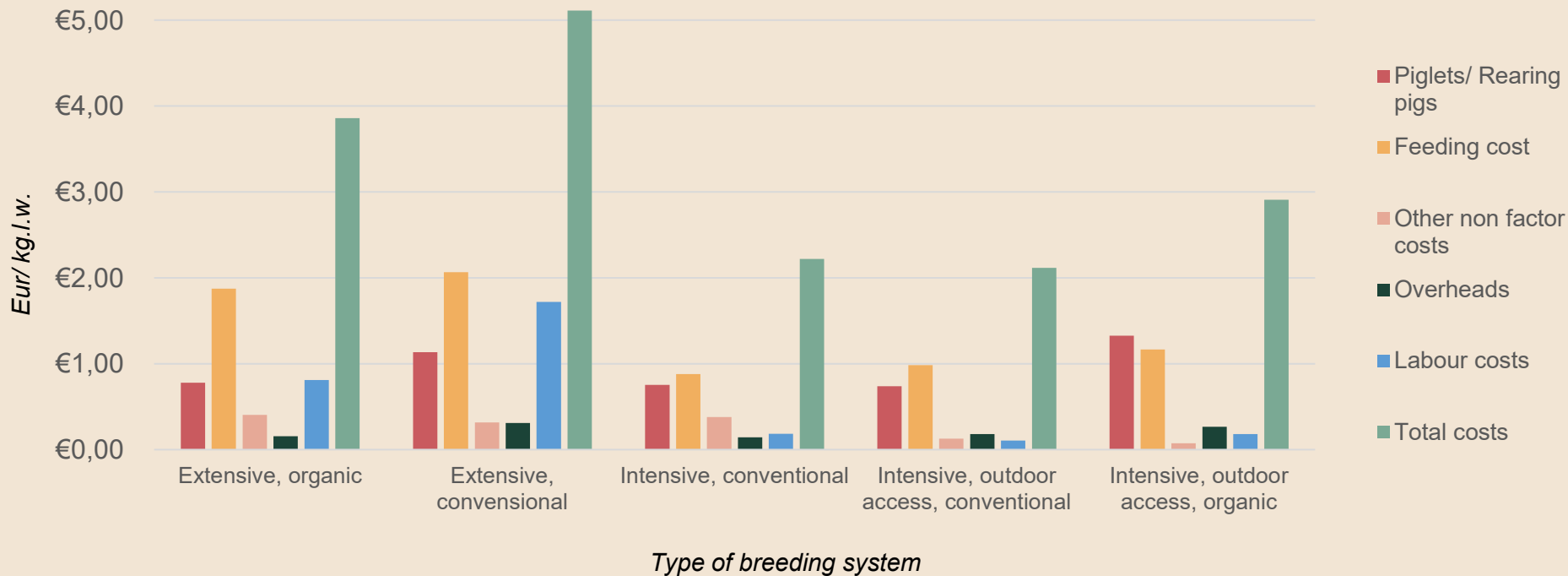
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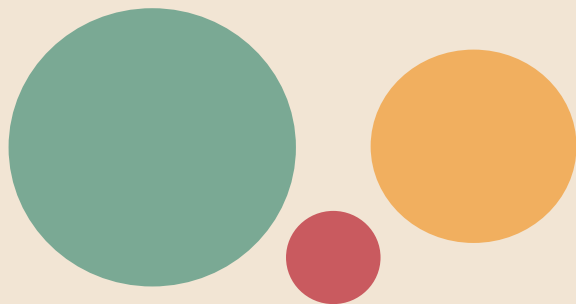
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Economic resilience

The data seen so far have an important significance from an economic point of view:

- idea of the economic feasibility of these different farming systems.
- the cost of production provides very important information regarding the price that will be offered to the consumer.



Only technical information



Economic resilience assessment



Economic resilience

Being able to withstand a shock without changing state and structure, spontaneously, organising structure in the economic-institutional and social spheres and finding new growth scenarios.



In a pig farm context, it could be translated into the ability of a farm to cope with disruptions or significant, unplanned changes in the social, legislative, labour, economic productive and climate environment that could threaten its operations, people, assets, brand, or reputation.



75% of farmers are members of pig producer associations

50% of farmers are members of an organization*

**producer group, purchasing feed, piglets or using machinery*

35% of farmers have undertaken training related to their business in the past 2 years

15% of farmers have undertaken training related to **extensive pig production** in the past 2 years

Farmers are on average ready to consider extensification the housing and management systems for fattening pigs in their farm



Farmers recognize that the equipment can be improved



They don't have the capacity to sustain significant investment



Loans and financing are not readily available



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Preliminary conclusions

Consumers generally prefer meat from extensive farming systems, BUT many farmers struggle to implement this aspect:

- challenging investments;
- non-immediate loans;
- lack of specialised staff.

In addition, extensive and organic farming exposes the farmer to challenges:

- higher mortality,
- lower yield,
- longer lead times.
- etc.

Moving to an extensive type of farming could be complex!

mEAT quality approach

1. Deepening and understanding consumer expectations and preferences.
2. Do not generalize only by breeding system but try to link **each production factor** typical of a farming type with a **specific intrinsic meat quality**.
3. Designing and communicating strategies for the creation of sustainable supply chains for farmers, for consumers, but in general for all actors involved in the supply chain.



Thank you for your attention

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