

CONTEXT PROFILE

 PORTUGAL



FARMER

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Herdade da Torre



INNOVATION

Synchronized births and genetic improvement



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Animal management



AGROCLIMATIC AREA

Mediterranean south



CLIMATE

Moderate rainfall



SOIL TYPE

Loam



MANAGEMENT

Pasture beef



TECHNICAL

Easy



FINANCE/INVESTMENT

High



MARKET

Local-rural



SOCIAL

Full-time farmer

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| Case Study: PT_13 | Agroclimatic Zone | | | | | | | | |
|--|-------------------|------------------|----------------|----------------|--------|-------------------|-------------------|---------------------|---------------------|
| Item (Key Innovation Elements) | Alpine | Atlantic Central | Atlantic North | Atlantic South | Boreal | Continental North | Continental South | Mediterranean North | Mediterranean South |
| Improving livestock management facilities (cattle alley) under large-scale farming | ++ | +++ | +++ | +++ | +++ | +++ | +++ | +++ | +++ |
| Artificial insemination for genetic improvement | +++ | +++ | +++ | +++ | +++ | ++ | ++ | +++ | +++ |
| Own haylage product to have control over quality and costs | ++ | +++ | +++ | ++ | +++ | +++ | +++ | +++ | +++ |
| Bull management with a bull vaccination program | +++ | +++ | +++ | +++ | +++ | +++ | +++ | +++ | +++ |
| Herd management with synchronised breeding | +++ | +++ | +++ | +++ | +++ | ++ | ++ | +++ | +++ |

 Strong transferability
  Slightly limited transferability
  Very limited transferability
  Generic information/not relevant

Implementation Gaps

- High financial investments for infrastructure improvements
- High costs and labour needs
- Concerning herd management, lack of skilled inseminators to accurately detect heat cycles, specialized equipment
- High costs for vaccinations/semen

Research Gaps

- Oestrus detection in beef cattle in extensive systems

Suggestions to Adapt

- Rotating bulls in and out of the cow herd (in for a week, out for a week)
- Bulls should be vaccinated well ahead of the breeding season

COST-BENEFIT ANALYSIS

INVESTMENT COSTS

| | |
|---|------|
| Total initial investment costs at start up: | high |
| • Initial authorisation costs (e.g. sanitary, veterinary, etc.) | mid |
| • Initial advisory costs | low |
| • Initial buildings and machineries | high |
| • Initial certification costs | mid |
| • Initial working capital (personal qualification, marketing and promotion, etc.) | high |

ON-GOING COSTS

| | |
|--|------|
| On-going advisory costs | low |
| On-going certification costs | low |
| On-going buildings and machinery costs | high |
| On-going working capital | high |

BENEFITS RELATIVE TO ORIGINAL SYSTEM

◦ Economic

| | |
|--|--------------------------|
| Reduction in energy consumption (electricity; fuel consumption) | not applicable/not known |
| Reduction in input use (fertilizers; pesticides; feed) etc. | mid |
| Payback period | mid |
| Product value added | not applicable/not known |
| Additional farm income through agroecological/agri-environmental payment schemes | not applicable/not known |

◦ Environmental

| | |
|---------------------------------------|--------------------------|
| Animal feed self-sufficiency increase | not applicable/not known |
| Biodiversity increase | mid |
| Improved nitrogen cycling | high |
| Soil regeneration | high |
| Animal health and welfare improvement | high |

◦ Social

| | |
|--------------------------------|--------------------------|
| Workload reduction | high |
| Engagement of young generation | not applicable/not known |

Literature

National Language

- <https://www.lifemaronesa.eu/instalacao-de-mangas-de-maneio-nos-baldios-parceiros-do-projeto/>
- <https://www.dgav.pt/wp-content/uploads/2021/01/Manual-bp-Bovinos-2.pdf>