

CONTEXT PROFILE

 PORTUGAL



FARMER

Carlos Mira - Herdade da Carneira



INNOVATION

Improving the resilience of the Montado to drought and pests



[Video](#)



MAIN DOMAIN OF THE INNOVATION

Improvement of grassland management



SOIL TYPE

Sand



FINANCE/INVESTMENT

Mid



AGROCLIMATIC AREA

Mediterranean south



MANAGEMENT

Pasture beef



MARKET

Local-rural



CLIMATE

Little rainfall



TECHNICAL

Easy



SOCIAL

Full-time farmer

CONTEXT PROFILE

 PORTUGAL

Case Study: PT_03	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Water basins to conserve water for irrigation	+++	+++	+++	+++	+++	+++	+++	+++	+++
Production diversification	+++	+++	+++	+++	+++	+++	+++	+++	+++
Density reduction of cork oaks for phytosanitary improvement	X	X	X	X	X	X	X	++	++
Sowing clover and grasses in meadows for quality improvement	+++	+++	+++	+++	+++	+++	+++	+++	+++

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

Implementation Gaps

- Water conservation will not be possible on every location
- The Montado system is only possible under specific climatic conditions

Research Gaps

- Efficiency of the practice for phytosanitary improvements
- Optimum management for the Montado under a changing climate

Suggestions to Adapt

- None

COST-BENEFIT ANALYSIS

INVESTMENT COSTS

Total initial investment costs at start up:	low
• Initial authorisation costs (e.g. sanitary, veterinary, etc.)	not applicable/not known
• Initial advisory costs	low
• Initial buildings and machineries	low
• Initial certification costs	not applicable/not known
• Initial working capital (personal qualification, marketing and promotion, etc.)	low

ON-GOING COSTS

On-going advisory costs	not applicable/not known
On-going certification costs	not applicable/not known
On-going buildings and machinery costs	not applicable/not known
On-going working capital	not applicable/not known

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	not applicable/not known
Product value added	mid
Additional farm income through agroecological/agri-environmental payment schemes	not applicable/not known

◦ Environmental

Animal feed self-sufficiency increase	none or low
Biodiversity increase	high
Improved nitrogen cycling	mid
Soil regeneration	high
Animal health and welfare improvement	none or low

◦ Social

Workload reduction	none or low
Engagement of young generation	none or low

Literature

National Language

- https://dspace.uevora.pt/rdpc/bitstream/10174/10116/1/Livro%20Verde%20dos%20Montados_Versao%20online%20%202013.pdf
- https://www.acos.pt/files/joana_amaral_paulo_alteracoes_climaticas_montado_cef_isa.pdf

English

- [https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/651982/EPRS_BRI\(2020\)651982_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/651982/EPRS_BRI(2020)651982_EN.pdf) [general document on Agroforestry in the European Union]
- <https://doi.org/10.1007/s13595-015-0534-1> (Cork oak pests: a review of insect damage and management)
- <https://www.nature.com/articles/s41598-020-64650-9> (Cork oak and climate change)