

Portuguese Testing Ground The Montado Cork System

Location

This Testing Ground is located in Portugal in the Alcochete Region and is centred on a farm.

Goal

To improve soil quality and grazing management within the Montado system. Through these actions, it aims to preserve the health of cork oak trees, increase the productivity of the system, and reduce production costs.

Innovation

Through a soil health-based approach, the innovation lies in improving an already existing agroforestry system. Rather than introducing a new technology, it relies on targeted management practices to sustainably strengthen the ecological and economic resilience of the Montado system.

Soil Health Challenge

land managers generally have little incentive to invest in healthy soils, as they cannot sufficiently capture the value generated by these ecosystem services



SHBM Description

The model is based on the introduction and evaluation of two land management practices: the application of soil amendments (particularly limestone and boron) to correct specific soil chemical imbalances, and the adoption of rotational grazing to allow fields to recover after grazing. These practices, designed to be simple and easily replicable, are tested under local conditions to assess their contribution to the sustainability of the system.

Actor Network

- Land managers
- CONSULAI (project coordinator and funding provider)
- Soil experts
- Farmers participating through the Community of Practice (CoP)
- Montado Living Lab

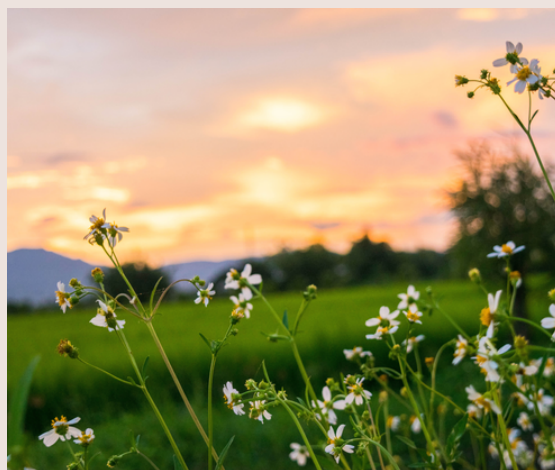
The Montado ecosystem includes cork oak trees, grazing animals, experimental plots, fencing infrastructure, soil samples, and soil amendments such as limestone, boron and fertilisers.



Value Creation Mechanism

Value creation is based on the collaboration between land managers, who provide the land and labour, and CONSULAI, which provides technical expertise, funding and scientific monitoring.

Through soil correctors and rotational grazing, the model improves the quality and quantity of cork production, reduces forage-related costs and can offer opportunities to benefit from CAP subsidies.



Dominant Value Rationales



Green

Focuses on improving soil health, biodiversity, water retention, and reducing tree mortality.



Industrial

Emphasises soil analyses, monitoring, and evidence-based assessments to identify the most effective management practices.



Project

Promotes knowledge sharing, collaboration through Communities of Practice and Living Labs, and the wider adoption of soil-friendly practices



Market

Focuses on increasing cork productivity and quality, reducing forage costs, and improving farm profitability.



Domestic (Cultural)

Highlights the preservation of the Montado system as a traditional and culturally significant agroforestry system.

Main Results

It shows a way of reorganising the sugar beet value chain around shared incentives and responsibilities. The initiative is gradually becoming more attractive as new actors join the network and as peer-to-peer exchanges, demonstrations, and technical expertise influence farming practices and the long-term strategies of farms.



Barriers and Challenges

The upfront costs of implementation, the long delay between interventions and measurable benefits, limited support from existing policy schemes that reward practices rather than outcomes, and weather-related disruptions such as heavy rainfall and flooding that can delay field operations.

Lessons Learnt

- Soil analysis ensures that interventions are both relevant and scientifically grounded.
- trust and knowledge transfer are important for translating expertise into practice
- Collaborative networks supports long-term continuity.



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