



EU CAP Network workshop
'Enhancing food security under changing
weather patterns: farm adaptation'

14 - 15 March 2023, Bologna | Italy



Funded by
the European Union

Workshop: 'Enhancing food security under changing weather patterns:
farm adaptation' | 14-15 March 2023 | Bologna, Italy



LIFE Montado-Adapt project

An example of adaptation solutions at farm level in the domain of permanent crops

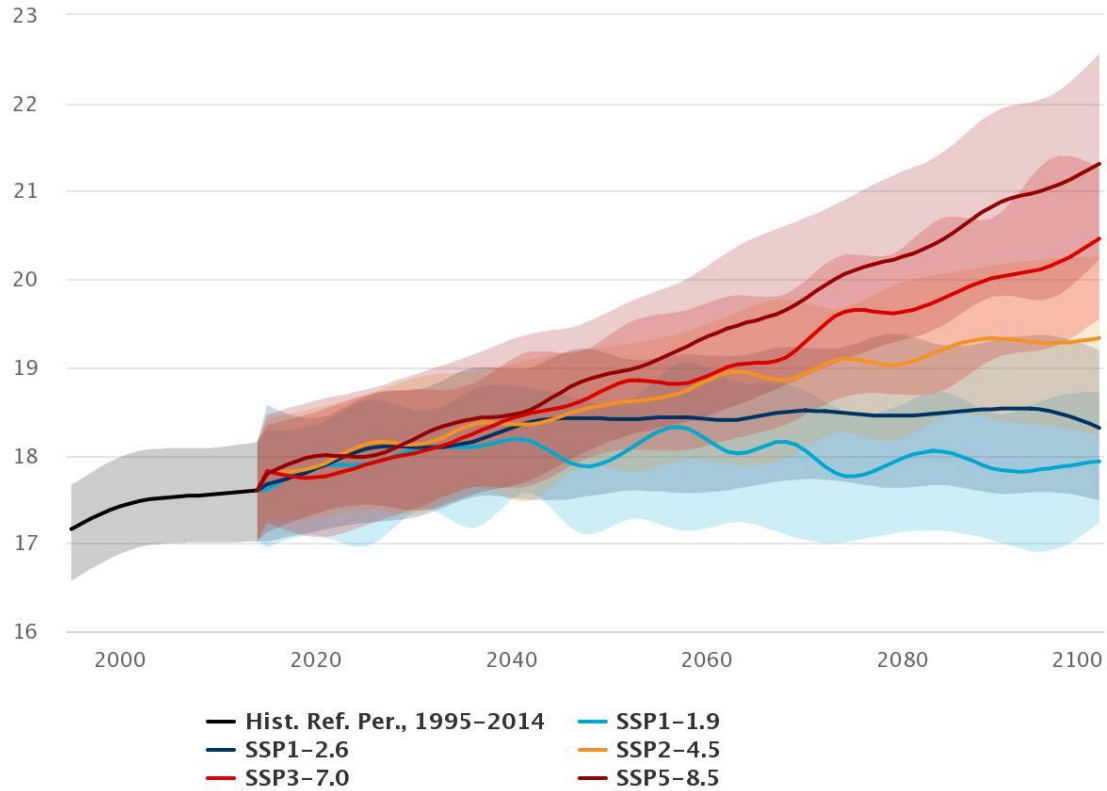
María Bastidas

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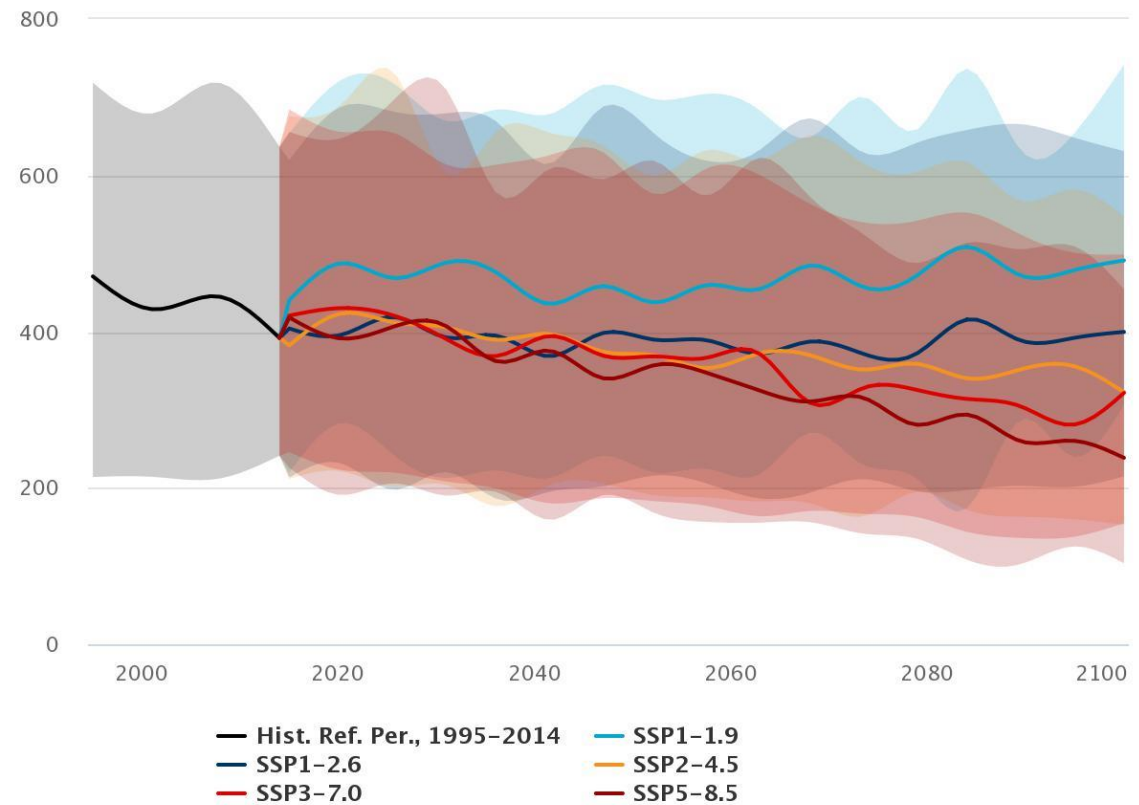


Climate change

Projected Mean-Temperature
Beja, Portugal; (Ref. Period: 1995–2014), Multi-Model Ensemble



Projected Precipitation
Beja, Portugal; (Ref. Period: 1995–2014), Multi-Model Ensemble



Montado/Dehesa system

- It is heterogeneous set of non-timber forest production system, based on the exploration of quercus species, in combination with a non-intensive use of agricultural, livestock and/or hunting. It is classified as an agro-silvo-pastoral and multifunctional system, typical for southern and central Portugal and Spain.
- Conservation habitats “**Dehesas with evergreen *Quercus spp*”** (6310)



Effects of CC on Montado/Dehesa system



>50% Dense Montado

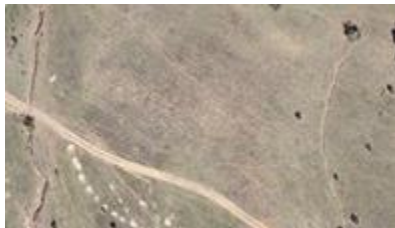
- 1990 - 2006 ~90.000 ha loss
- Reduction > 5500 ha/year
- Estimated reduction ~9000 ha/year



20 - 50% Open Montado



10 - 20% Clear Montado



< 10% Open Pastures

Causes

Land use change (replacement by intensive permanent crops), abandonment or intensification and unsustainable agricultural practices.

Climate change effects

Increased tree decline and mortality; Decreased productivity and quality of pastures; Reduction of animal production; Decrease of available water; Soil degradation and Decrease of profitability.

LIFE Montado-Adapt

- 17 partners (multi-actor approach; 2 countries; 3 regions)

- Goal: promote the climate change adaptation of the Montado/Dehesa by increasing the sustainability at an economic, social and environmental level.





TREES

Farm adaptation

- Protection of natural regeneration (4)
- Plantation or seeding (7)
- Diversification (1)
- Promotion of auxiliary fauna(2)
- Promote tree vitality (2)

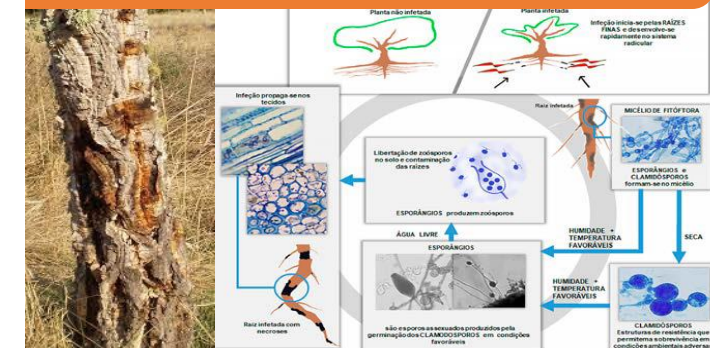
Use of species adapted to each microclimate



Pest Control and Diagnosis

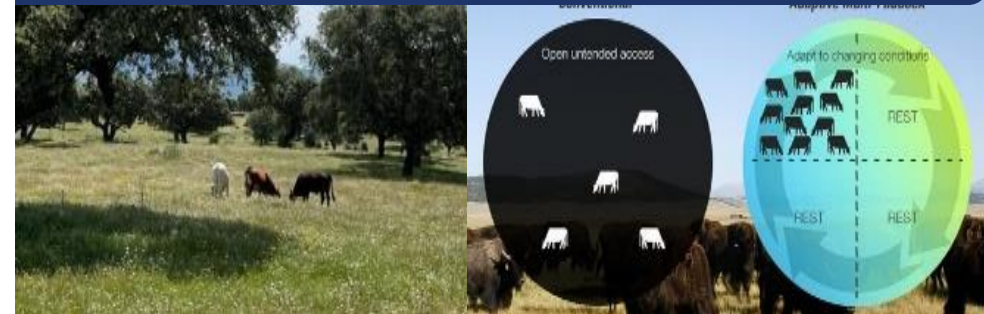


Diagnosis and control of diseases



- Improving the productivity and quality of pastures (3)
- Diversifying the sources of livestock feed (1)
- Improving animal welfare (2)
- Increase livestock self-sufficiency (1)

Adaptive grazing management



- Water retention in the landscape (3)

Promote aquatic habitats



- Improving water quality (2)



Farm adaptation

- Increasing soil moisture, biodiversity and fertility (5)
- Reduce soil compaction and erosion (3)



Conclusions

- The climate change adaptation have challenges at legal, procedural, financial, technical and market-based level.
- The success of adaptation depends on an effective governance model with all actors of the sector.
- An agriculture Knowledge and Innovation Systems strong is mandatory.
- It is essential to eliminate contradictions and create synergies between policies and support.



Thank you!



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All information on the workshop is available
on the **[EU CAP Network website](#)**

On the event webpage: **https://eu-cap-network.ec.europa.eu/events/eu-cap-network-workshop-enhancing-food-security-under-changing-weather-patterns-farm_en**