



Characterization of Landscapes and Key Community Systems (KCS)

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The Future of Beaches and Coastal Ecosystems in Sardinia: What Actions to Face Climate Challenges?

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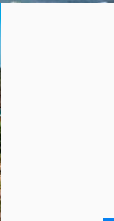
The landscape and its functions

- ▶ A "landscape" refers to a specific part of a territory as perceived by people, whose character results from the interaction of natural and/or human factors.
- ▶ Landscapes play important cultural, ecological, environmental, and social functions and represent a valuable resource for economic activities.
- ▶ If properly safeguarded, managed, and planned, landscapes can contribute to job creation.
- ▶ They shape local cultures and are a fundamental component of Europe's cultural and natural heritage, contributing to human well-being, satisfaction, and European identity.
- ▶ Landscapes are a key element of quality of life everywhere—whether in urban or rural areas, degraded zones, or high-value landscapes, including both exceptional places and everyday environments.



Landscape Characterization

- ▶ The characterization of landscapes is a process that identifies, describes, and classifies their physical, ecological, and cultural attributes.
- ▶ This process integrates spatial data, topography, land use, vegetation, and hydrology, aiming to understand how landscapes influence and are influenced by climate..
- ▶ Why is Landscape Characterization Important?
 - ▶ Identifies vulnerabilities and strengths of ecosystems.
 - ▶ Provides insights for sustainable land management practices.
 - ▶ Guides territorial planning to mitigate climate risks.
 - ▶ Supports the conservation of biodiversity and ecosystem services.



Key Community Systems (KCS)

Key Community Systems (KCS) are systems that fulfill essential societal needs but are increasingly affected by climate change.

This approach analyzes social, economic, and infrastructural components of communities to assess their resilience and vulnerability to climate change. It focuses on interdependencies and critical systems such as:

Key Components of KCS Analysis:

Population demographics

Economic factors and livelihoods

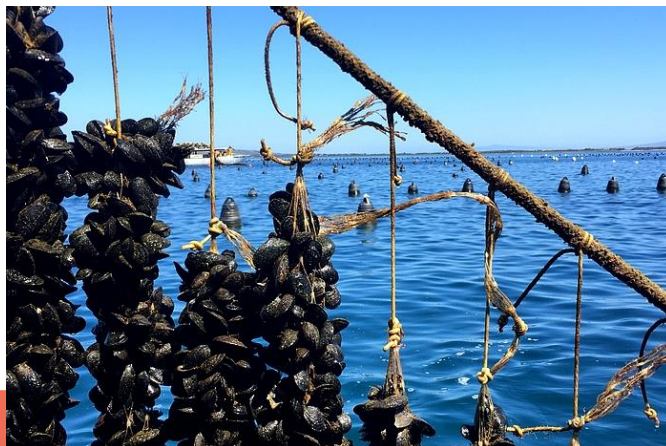
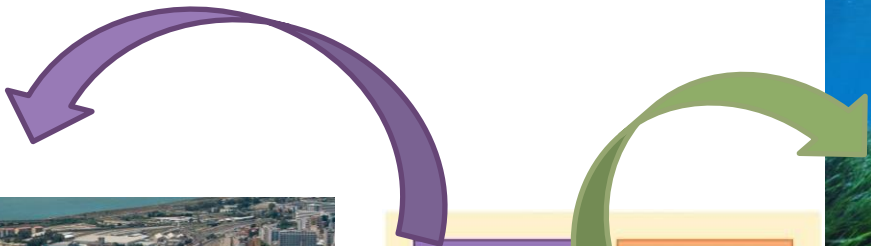
Critical infrastructures

Community networks and governance

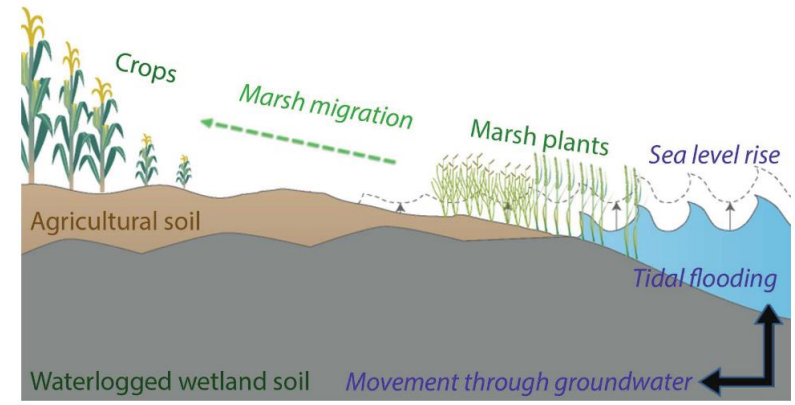




Examples of KCS in Coastal and Marine Areas



Examples of KCS in Coastal and Marine Areas





Key Community Systems (KCS)

▶ Why is characterization of CC impacts in KCSs important?

1. It is needed to identify local vulnerabilities
2. It is needed to assess the adaptive capacity of local populations
3. It is useful for supporting targeted interventions to improve resilience
4. Promotes equitable adaptation strategies, responding to the diverse needs of communities.

▶ Why integrate landscape and key community systems analysis into climate risk assessment?

Landscape characterization provides a physical and ecological basis, while KCS analysis identifies human and infrastructure factors.

Integration provides a comprehensive view of risks so that the best adaptation and mitigation strategies can be identified



Thank you!

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