

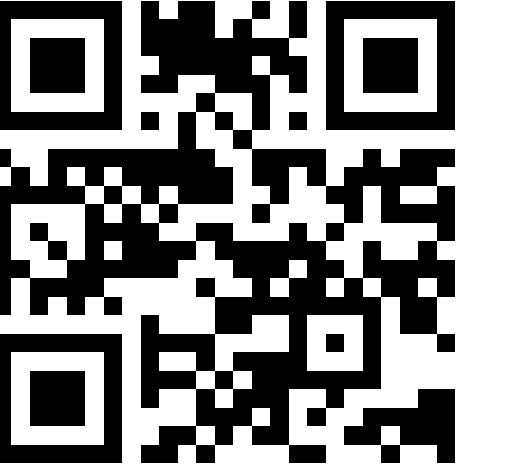
**Thematic Area:** Water management  
**Budget:** 2.835.714 €  
**Duration:** 44 months  
**Project website:** <https://www.salam-med.org/>

**State and Lead Partner:**  
ITALY,  
Desertification Research Center,  
University of Sassari

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#### Other in Consortium:

Partner 1, UNIFI – ITALY; Partner 2, CNR – ITALY; Partner 3, CIHEAM – FRANCE; Partner 4, DRC – EGYPT; Partner 5, IRA– TUNISIA; Partner 6, AoA – GREECE; Partner 7, CREDA – SPAIN; Partner 8, UCA– MOROCCO; Partner 9, UPV– SPAIN; Partner 10, MAT– TUNISIA; Partner 11, ABIES – SPAIN; Partner 12, 2P– ITALY; Partner 13, WW-GVC –PALESTINE; Partner 14, DNI – FRANCE

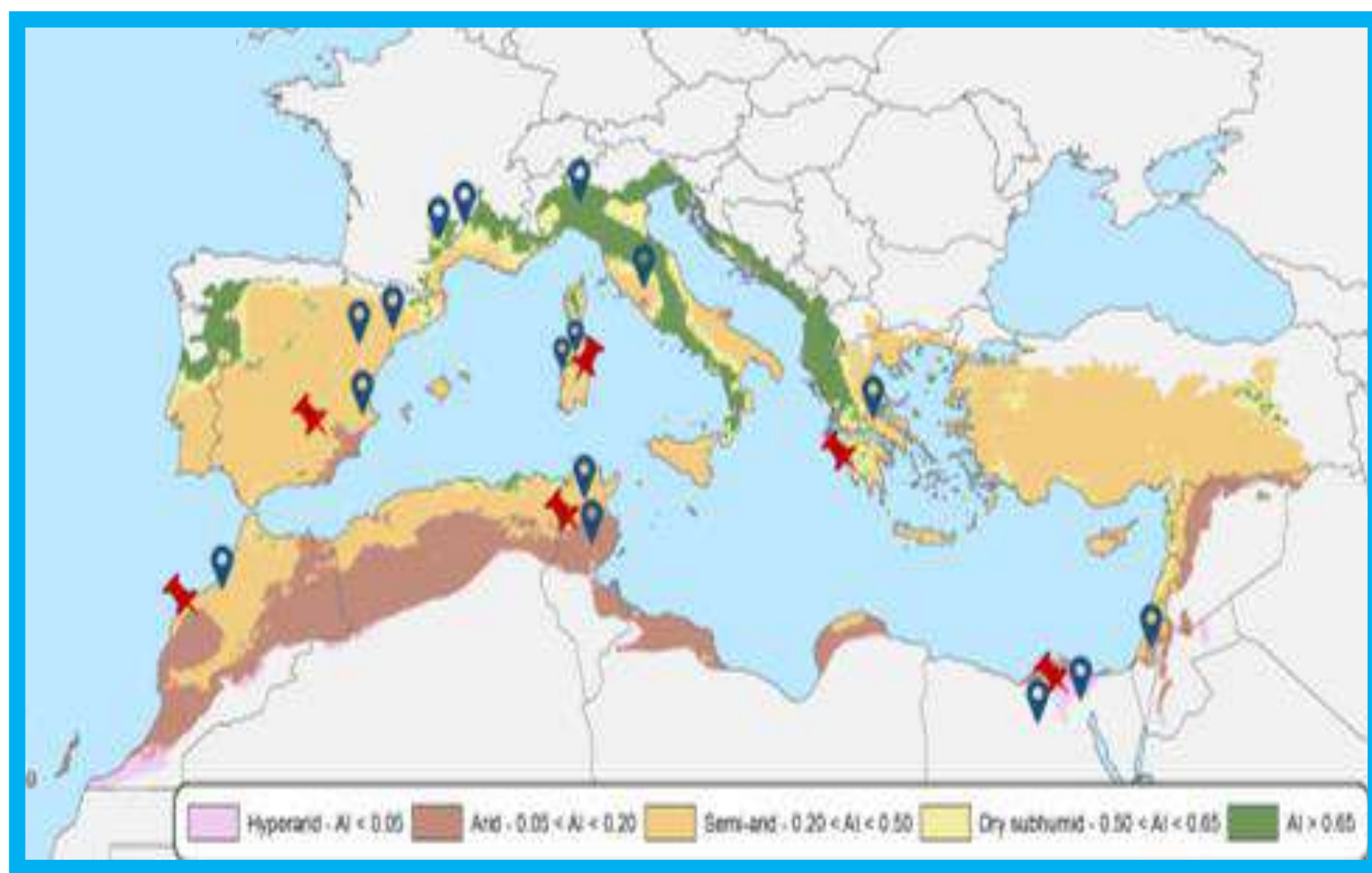


## 1 Problem statement and key objectives

**Land degradation and desertification** in MED drylands are driven by the interaction of ecological and socio-economic factors, exacerbated by climate change. This leads to the loss of essential services and livelihoods in rural areas.

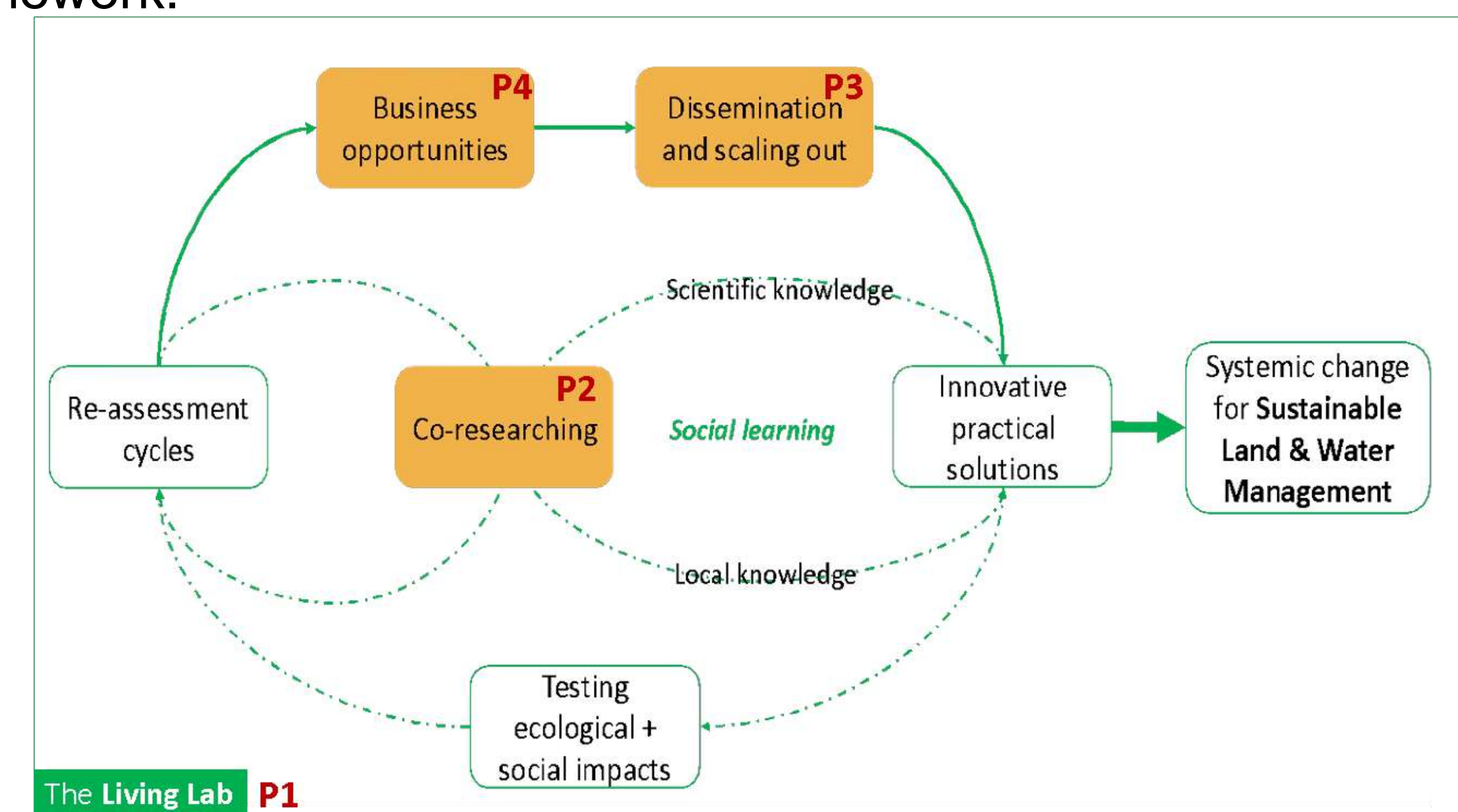
SALAM-MED key **hypotheses**:

- **Integrated top-down assessments with bottom-up capacity development** can effectively support dryland adaptive capacities.
- **Systemic innovations** require informed decision-making, new tools, technologies and services, including bio-based solutions.
- The MED region is a mosaic of different contexts, demanding **tailored solutions** to boost **sustainable development**.



## 2 Brief summary of the methodology

The SALAM-MED project has been guided by a four-pillar analytical framework.



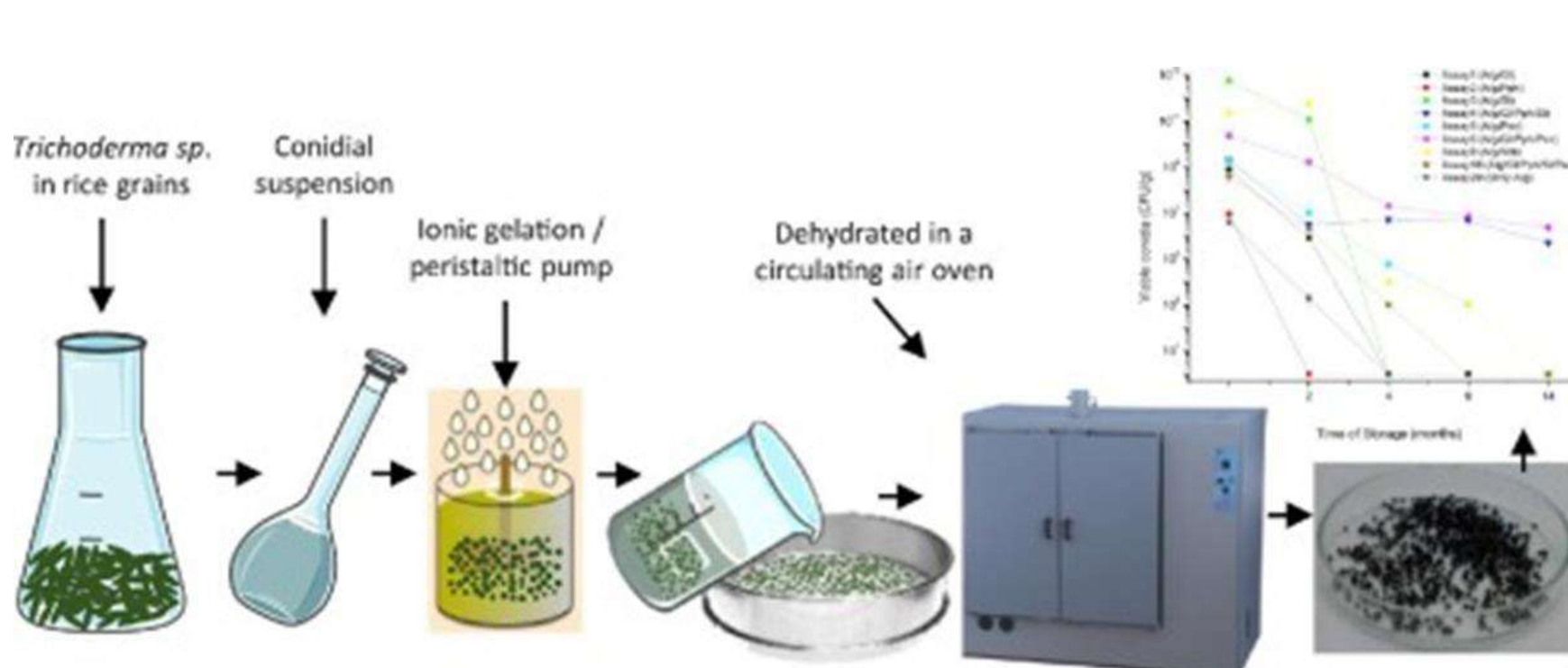
The SALAM-MED **Living Labs** have been aiming to address soil and water degradation challenges. They have been designed as hubs for **knowledge integration**, **co-innovation**, and **validation** of practical solutions. The **active engagement** of **women** and **youth** in **co-research** activities has been a strategic component. The emerging business opportunities have been coupled with improved soil fertility and resilience.

## 3 Technologies and solutions

SALAM-MED has been promoting a range of innovative technologies and solutions targeting **Dryland resilience** and **Dryland restoration**.

- **Adaptive vegetation management tool** to increase water availability, climate resilience and forest protection from wildfires.
- **DSS for MED silvopastoral systems** to support farmers in selecting optimal agronomic practices and forage crops.
- **Integrated olive orchard management** to improve water retention and prevent soil degradation.
- **Protocols on microbial-based solutions** to enhance yield and plant resistance to water scarcity and soil salinity.

- **Levelled terraces for water harvesting** providing experimental evidence of their potential for exploitation in hyper-arid environments.
- **Managed aquifer recharge** to enhance crop productivity and promote smart irrigation practices in arid regions.
- **Subsurface water retention technology** to support argan tree reforestation in arid and semi-arid regions.



SALAM-MED has been designing a **scaling-out platform** to showcase the living labs and technologies tested within the project. The platform will help to connect entrepreneurs, local communities, and institutions committed to tackling land degradation and desertification in the MED.

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