



THE PRIMA PROGRAMME

The **PRIMA Foundation** "Partnership for Research and Innovation in the Mediterranean Area" aims to build research and innovation capacities and to develop knowledge and common innovative solutions for agro-food systems and water management and provision in the Mediterranean region.

The PRIMA Programme aims at strengthening the integration and alignment of research and innovation systems and activities in the Mediterranean region in the fields of water management and provision and agro-food systems, with a multidisciplinary approach, contributing to the: sustainable management of water in arid and semi-arid areas; sustainable farming systems under Mediterranean environmental constraints; Mediterranean food value chain for regional and local development.

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SALAM-MED SUSTAINABLE APPROACHES TO LAND AND WATER MANAGEMENT IN MEDITERRANEAN DRYLANDS



This project is part of the PRIMA Programme supported by the European Union



SUSTAINABLE APPROACHES TO LAND AND WATER MANAGEMENT IN MEDITERRANEAN DRYLANDS

SALAM-MED is a Research and Innovation project aimed at developing practical and nature-based solutions to enhance the resilience of Mediterranean socio-ecological systems, while preventing land degradation and recovering degraded land. SALAM-MED is designed to ensure the active engagement of local communities, **particularly women and youth**, in the **Living Labs**, to integrate knowledge and validate innovative solutions.

The project has a dual objective:

- **Enhance the resilience of rural communities** by increasing their adaptation and response capacity to abandonment and ecosystem degradation caused by anthropogenic and climatic pressures
- **Generate business opportunities** associated with sustainable land and water management

CHALLENGES

DESERTIFICATION

30% of semi-arid Med drylands
47% of people affected
IEMed 2011

SILVOPASTORAL SYSTEMS IN THE MEDITERRANEAN AREA

6M ha in the EU
FAO 2018

OLIVE TREES IN THE MEDITERRANEAN BASIN

9M ha total
5M ha in Southern Europe
4M ha in Northern Africa
FAO 2022

ARGAN OIL GLOBAL MARKET

CAGR 9.8% (2024-2030)
332M USD in 2024
724M USD in 2030
USD Analytics 2024



SALAM-MED Key Hypotheses

- The MED region is a mosaic of diverse contexts, requiring tailored solutions for sustainable development
- Integrated top-down assessments combined with bottom-up capacity development can enhance adaptive capacities in drylands
- Systemic innovations require informed decision-making, technologies, and services, including bio-based solutions



KEY EXPLOITABLE RESULTS

Key exploitable results

- Adaptive vegetation management tool to increase water availability, climate resilience, and forest protection from wildfires
- Decision Support System (DSS) for MED silvopastoral systems to support farmers in selecting contextualized agronomic practice
- Integrated olive orchard management to improve water retention and prevent soil erosion
- Protocols on microbial-based solutions to enhance yield and plant resistance to water scarcity and soil salinity
- GPS collars to promote adaptive multi-paddock grazing

Dryland restoration

- Leveled terraces for water harvesting providing experimental evidence of their potential for exploitation in hyper-arid environment
- 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

15 Partners

6 Living Labs for interaction between researchers and local stakeholders, located in areas at risk of desertification: **Italy, Spain, Greece, Morocco, Egypt, Tunisia**

Project Duration: **April 2022 - March 2025**

