



# Rethinking the Futures of Mediterranean Land and Water

## KEY MESSAGES

- The Mediterranean faces accelerating climate, water and socio-economic crises that require coordinated, cross-border action.
- PRIMA has proven effective in fostering Euro-Mediterranean cooperation and validating context-adapted innovations.
- A successor framework, PRIMA 2, is essential to scale solutions and address worsening regional vulnerabilities.
- Nexus approaches linking water, soil, energy, food and ecosystems yield greater resilience and impact.
- Co-design through Living Labs significantly improves innovation relevance, legitimacy and adoption.
- Stronger integration of social sciences is needed to understand behaviours, governance and cultural drivers of change.
- Science-policy interfaces must be institutionalised to translate research into actionable policies.
- Digital platforms and knowledge hubs can sustain cross-border learning beyond project lifecycles.
- Youth, women, SMEs and Southern Mediterranean actors must be empowered as co-leaders, not just beneficiaries.
- Scaling requires not only robust technologies but also enabling governance, financing, capacity and social acceptance.



science, policy and society, while empowering local communities to co-develop sustainable pathways. This ambition lies at the foundation of the **Partnership for Research and Innovation in the Mediterranean Area (PRIMA)**, launched in 2018 to enhance Euro-Mediterranean cooperation on water scarcity, sustainable agriculture and resilient food systems. Since its establishment, PRIMA has mobilised nearly €600 million, supported over 260 cross-border projects, engaged more than 2,500 participants, and produced 170 exploitable results and 127 demonstration sites. This substantial legacy demonstrates PRIMA's capacity to validate innovative solutions tailored to the diverse realities of the Mediterranean. However, with its current mandate ending in 2027, and with drought, soil degradation, water-food-energy vulnerabilities, geopolitical instability and socio-economic inequalities worsening, a successor programme - PRIMA 2 - is urgently

## Summary for Policy Makers

The Mediterranean region stands at a decisive turning point. Increasing pressures from climate change, desertification, water scarcity, land degradation, and widening socio-economic inequalities are threatening the stability of ecosystems and societies. These challenges are transboundary and deeply interconnected, generating competition over natural resources and undermining regional cohesion. Addressing them requires coordinated, systemic responses that bridge



needed. The joint communication prepared by the PRIMA Foundation, FAO, UNCCD, the youth-led initiative NextGen4MED and representatives of PRIMA-funded projects identifies strategic recommendations to deepen impact, accelerate uptake, and build an integrated, inclusive, and adoption-oriented Euro-Mediterranean cooperation framework.

## Key Lessons from PRIMA: Governance, Integration, and Co-Creation

PRIMA's experience highlights three major areas of strength. First, its joint governance model—co-funding and co-design between EU and non-EU Mediterranean countries—has proven effective in supporting science diplomacy and fostering balanced partnerships. Shared priority-setting has ensured research responds to local needs. A clearer differentiation between Section 1 and Section 2 calls could further improve alignment with the diverse capacities across Mediterranean countries.

Second, PRIMA projects applying a Nexus approach—addressing water–energy–food–soil–ecosystem interdependencies—have been more successful in tackling complexity under climate stress and demographic pressure. Examples include subsurface water retention combined with compost and mycorrhizae in argan agroforestry systems, and decision-support tools for multifunctional forest management.

Third, Living Labs and co-design processes are crucial. Projects involving farmers, local authorities and communities from the outset have achieved higher relevance and greater adoption potential, moving beyond extractive research towards genuine knowledge co-creation. Innovation support mechanisms, such as the Horizon Results Booster, have also strengthened exploitation pathways.

Despite significant technological progress, opportunities remain to better integrate socio-economic, cultural and institutional dimensions. Expanding the role of social sciences and behavioural research, strengthening adoption pathways, improving science-policy-practice interfaces, and enhancing participation by Southern Mediterranean partners, SMEs, women and youth are essential to increasing ownership and impact.



## Research Priorities for PRIMA 2

### 1. Advance Nexus-Based Approaches

Future projects should generate multi-benefit solutions that integrate water, soil, biodiversity, agriculture and climate resilience.

**1.1 Reduce water scarcity and inefficiency** through smart irrigation, managed aquifer recharge, wastewater reuse, AI-based land monitoring, agroecology and efficient soil–water–crop management.

**1.2 Restore soil fertility and achieve land degradation neutrality** using sustainable land management, carbon sequestration practices, natural infiltration systems, adaptive forest management and soil carbon indicators aligned with EU missions.

**1.3 Protect ecosystems and biodiversity by integrating nature-based solutions** - such as constructed wetlands, forested infiltration areas and ecosystem-based livestock management—with food and water security.

**1.4 Promote climate-smart agriculture** supported by digital platforms, drought-resilient crops, biostimulants, deficit irrigation strategies and real-time monitoring tools.

### 2. Integrate Social Sciences, Humanities and Behavioural Research

PRIMA 2 should **value socio-economic and cultural analyses as equal components of research design**. Key areas include governance, power dynamics, gender and generational relations, trust-building, traditional ecological knowledge, and sociocultural factors shaping adoption.

### 3. Establish Clear Monitoring & Evaluation Criteria for Living Labs

**Clear methodological definitions and flexible evaluation frameworks** are needed to ensure comparability and quality. Communication and facilitation expertise should be embedded in projects to support engagement and knowledge exchange.



#### 4. Strengthen Scaling Pathways and Knowledge Exchange

Projects should move **from single-site demonstrations to multi-site adaptation**, producing “adoption packages” with technical, institutional and sociocultural guidance. A shared PRIMA data platform would improve accessibility, interoperability and cross-project synergies.

#### 5. Invest in Next-Generation Researchers and Innovation Leaders

**Youth-led initiatives** like NextGen4MED show the value of nurturing new scientific and innovation leaders. Dedicated youth funding tracks, intergenerational mentorship programmes, and incentives for transdisciplinary research would strengthen long-term capacity across the region.

### Policy Priorities

#### 1. Create Science-Policy Decision Labs

Projects should report economic, societal and policy **engagement metrics**, and develop **actionable policy outputs co-created** with policymakers, practitioners and end-users. Alignment with UNCCD, CBD, UNFCCC, SDGs and financial institutions is essential. Training on policy communication and science-policy interfacing should target early-career researchers and youth networks.

#### 2. Build a Lasting Mediterranean Knowledge Hub

A **digital hub-building** on initiatives like the Med Water Hub should host FAIR datasets, adoption packages, policy briefs and technical resources, integrated with UNCCD and FAO platforms. A Mediterranean Dryland Observatory and a cross-regional Living Lab database would support coordination and knowledge transfer.

#### 3. Support Institutional Continuity through Formal Agreements

**Long-term agreements** among research institutions, ministries, universities and farmer organisations would ensure continuity beyond project lifecycles. Network maintenance grants and clustering calls could prevent the dissolution of established partnerships and promote cumulative learning.

### Adoption Priorities

#### 1. Launch Delivery Instruments with Clear Guidelines

Continue and enhance PRIMA2 dedicated program components to foster co-design (e.g. Living Labs), transform validated innovations into investment opportunities (e.g. Investment-Readiness Track) and promote peer networks and accompanying tools for knowledge exchange and innovation scaling (e.g. Nexus Communities of Practice)

#### 2. Prioritise Co-Design with Local Stakeholders

Encourage evolution of research beyond consultation toward co-design, incorporating evaluation criteria that capture and reward meaningful engagement of stakeholders with different capacities, power, and influence. Institutionalise stakeholder inclusion and incentivise structured roles for coopera-



tives, SMEs, youth, and women innovators, for instance by: identifying and empowering key lead farmers who can serve as champions, creating a snowball effect in adoption; creating a formal advisory board of farmers within project governance structures to ensure their voices inform decision-making throughout the project lifecycle; establishing systematic feedback mechanisms from farmers and local actors to refine practices and inform future research priorities. Encourage projects to implement explicit inclusion mechanisms for marginalised groups, for instance by designing interventions responsive to women’s needs, tailoring interventions to smallholder farmers’ constraints, reserving funding for youth-led initiatives, valuing local and experiential knowledge alongside scientific knowledge, and producing key outputs in local languages for wide accessibility.



# RETHINKING THE FUTURES OF MEDITERRANEAN LAND AND WATER



**A science–policy conference to capitalize on the legacies  
of recent PRIMA research and innovation projects**

**ACADEMY OF ATHENS, GREECE**  
**11 NOVEMBER 2025**














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### 3. Establish Post-Project Monitoring and Expand KPIs

Consider complementing and connecting “Exploitation Plans” with “Transformative Change Pathways” and tracking expanded indicators, e.g. governance innovation, social learning processes, policy adoption pathways, and cross-sector alliances. Consider developing and funding systems to monitor adoption, replication, policy uptake, and capacity outcomes beyond project completion, feeding insights into program design for evidence-based adaptation.

### 4. Strengthen Social Learning and Sociocultural Dimensions

Recognise innovation adoption as a social process shaped by cultural norms, trust networks, and collective learning. Support investments that strengthen sociocultural dimensions of adoption: social learning platforms (e.g. peer-to-peer exchange networks, Living Labs, Farmer Field Schools); digital storytelling and data visualisation to showcase benefits and build confidence in new practices (e.g. G20 Global Land Initiative Land Talks Podcast); recognise and engage with traditional systems; value cultural framings resonating with local identities and values; and foster intergenerational knowledge exchange.