



CALL TEXT AND SUPPORTING INFORMATION

Call: Section 1 – Farming Systems 2022

Topic 1.2.1-2022 (RIA) Developing integrated soil
data for the Mediterranean Region: a gateway for
sustainable soil management


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Thematic Area Farming systems

Topic 1.2.1 (RIA) Developing integrated soil data for the Mediterranean Region: a gateway for sustainable soil management

	<p><i>SRIA priorities addressed</i></p> <p>1.2 Soil sustainability</p> <p><u>OPERATIONAL OBJECTIVES</u></p> <ul style="list-style-type: none">- 2/LAND AND WATER SUSTAINABILITY- Cross-Cutting theme: SOIL SUSTAINABILITY
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Challenge

PRIMA, in close collaboration with the recently adopted [EU Mission A Soil Deal for Europe](#), is proposing an action aiming to create an enabling environment for the protection, restoration and improvement of soil health in the Mediterranean, a region already heavily distressed by the impacts of climate change and where drylands cover already 34% of the land surface. In addition to extreme climatic conditions prevailing in the area, unsustainable land and water management, overgrazing, deforestation, and wildfires turn large sections of these areas (approximately 30%) into deserts.

Degraded and salinized soils affect food security in the area and local smallholders' profitability while limiting local consumers' access to fresh, high-quality products. These conditions have significant socio-economic effects on Mediterranean populations, contributing to local displacements or migrations from the Middle East and North Africa into the EU.

To date, many efforts are made by international organisations (FAO) and by EC through the [Land Use and Coverage Area frame Survey](#) (LUCAS), the EC (Joint Research Centre) to develop methodologies, tools and indicators to collect soil information over Europe and the Mediterranean Region. There is an urgent need to harmonise methodologies and indicators to develop an easily accessible and standardised database of soil information enabling the assessment of the soil ecosystems in the region.

Scope

The main objective of this call is to derive a set of soil quality indicators (chemical, physical and biological), methods, measurements that need to be validated and harmonised to enhance the quantity, quality and availability of soil data and information in the Mediterranean for the sustainable management and protection of soil resources. This general goal should consider the specificities of Mediterranean environmental conditions where the limited rainfall regime and low green ground cover result in a high risk for soil degradation, salinization and desertification.

In this frame, proponents should:

- Review the state of monitoring and existing soil data in the PRIMA countries to identify gaps in the monitoring networks;
- Plan an exercise of a cross-country harmonisation of data;
- Develop or adapt existing indicators (chemical, physical and biological) for a region-wide assessment of soil ecosystem health.

When relevant, applicants should take advantage of the methodologies and tools developed by other EU H2020 Projects. The outcomes from the projects selected out of this call will contribute to and will contribute to the JRC Atlas Soil Atlas of the Mediterranean Region¹.

To enhance the activities, it is still needed to identify national and, in particular non-EU research infrastructures, potential and existing certified living labs in each country to better engage with the soil end-users and citizens as a whole. Attention should be paid to the sustainability of the action in the long term, mainly referring to the availability of soil data. Furthermore, these research infrastructures will be used to carry out, on-the-ground, a series of events promoting the Horizon Europe Soil Mission to better connecting with its objectives. Extensive involvement of stakeholders and, in particular, end-users is necessary to reach the expected objectives. The project's evaluation will emphasise explicit KPI to ensure quantifiable outcomes.

The project proponents should consider identifying potential synergies with other PRIMA projects focusing on research and innovation related to soil health.

¹ JRC Atlas Soil Atlas of the Mediterranean Region is planned for 2023/2024.

Expected Impacts

In short to medium term:

- Improved monitoring of soil and land degradation in the Mediterranean context through a harmonised set of indicators.
- Mapping of research infrastructures and Living labs as enabling environment for the monitoring and assessment
- Contribution to the JRC's Soil Atlas of the Mediterranean Region

In the long term:

- Assessing the potential positive effects on the agro-ecosystem water, carbon and nutrients cycle of appropriate soil management practices through a validated and harmonised set of indicators (biological, chemical, physical).
- Enabling Improved predictions for the potential role of Mediterranean soils for soil carbon sequestration and how external disturbances can affect this potential.
- Enabling the assessment of the potential positive effects on the agro-ecosystem water, carbon and nutrients cycle of appropriate soil management practices;
- Mitigating the advance in desertification through improved soil information systems able to alert on the current risks for soil degradation.

Key Performance indicators

Please provide specific KPIs to measure the outcomes of the projects

Links with EU policies, HE Mission's and Partnerships

The proposal should indicate linkages to relevant EU policies and objectives in the context of the European Green Deal and relevant [Horizon Europe Missions and Partnerships](#)

- [Horizon Europe Mission](#) in the area of Soil Health and Food
- European Partnership accelerating farming systems transition: agroecology living labs and research infrastructures
- European Partnership Agriculture of data
- European Partnership for Safe and Sustainable Food Systems for people, planet and climate
- European Joint Programme soil
- EU Soil Observatory

Links with SDGs

SDG 2 (zero hunger), to ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

SDG 3 (good health and well-being), by enhancing food security and other livelihood benefits, and by increasing the resilience of the land and the populations depending on it;

SDG 6 (clean water and sanitation), through its contribution to sustainable water management

SDG 13 (climate action), by increasing resilience and creating synergistic actions for climate change adaptation and mitigation, for example, by increasing soil carbon stocks;

SDG 15 (life on land), which focuses on the achievement of land degradation neutrality, by providing a suite of targeted, appropriate land management practices that prevent the loss of healthy land and maintain or improve the land's productivity.

Supporting information for the Section 1 call for Proposals, Topic 1.2.1

Type of action	Research and Innovation Action (RIA)
The total indicative amount allocated to this call	EUR 8.2 million
Funding level	According to Horizon 2020 Rules Funding Rate 100%
Technology Readiness levels (TRL)	RIA TRL 3-5 Proposals should clearly state the starting and end TRLs of the key technology or technologies targeted in the project.
Budget and duration of the grants	PRIMA considers that proposals requesting a contribution from the EU in the range of EUR 4.1 million and with a duration of 36 months would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude the submission and selection of proposals requesting other amounts or duration.
Eligibility conditions for participation	Please refer to section 5.1.1 for the List of countries eligible for funding. The standard admissibility (section 5.1.2) and standard eligibility conditions (section 5.1.3) apply.
Submission and evaluation procedure	The call will be organised according to a two-stage submission process. For the first step, a first-stage proposal (maximum ten pages) must be submitted within the first-stage submission deadline. Successful applicants in the first step will be invited to the second step to submit a full proposal (maximum 50 pages). A timeline for the submission and evaluation of applications can be found in Table 6 .
Evaluation rules	The award criteria, scoring, thresholds and weightings for RIAs, listed in part 5.1.7 , will be used.
Grant agreement	PRIMA MGA (multi-beneficiary), based on Horizon 2020 MGA.
Consortium agreement	Participants in projects resulting from this call for Proposals must conclude a consortium agreement before the conclusion of the PRIMA grant agreement.