

CALL TEXT AND SUPPORTING INFORMATION

Call: Section 1 - Nexus theme 2023

Topic 1.4.1-2023 (IA) Accelerate adaptation and mitigation to climate change in the Mediterranean region by deploying WEFE nexus solutions.

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Nexus theme

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	Nexus theme
Alignment SRIA priorities	Priority 1.2 Water sustainability in the Mediterranean region should be ensured through improved technical tools coupled with socio-economic tools and governance, organisational and/or business models to define water-use limits in certain key areas under present and future global change scenarios. Priority 1.4 Use of alternative water resources Priority 2.2 Developing sustainable and productive agro-ecosystems
	OPERATIONAL OBJECTIVES - 2/LAND AND WATER SUSTAINABILITY - 4/ SMART AND SUSTAINABLE FARMING
Alignment with EU strategies	European Green Deal, Water Framework Directive (WFD) Circular Economy Action Plan

Challenge

Climate change-associated extreme events, such as droughts and flooding, are considered one of the main challenges Mediterranean countries face. Temperature is expected to continue rising, and rainfall patterns are projected to continue changing, thus increasing risks and vulnerability in a region with limited adaptive capacity. By 2050, the demand for water and food is projected to increase by over 50%, while global energy demand will have nearly doubled, leading to competing needs for the already depleted and degraded scarce resources.

These challenges could affect food security, nutrition and livelihoods, triggering migration. Regarding economic development, climate change is a wicked problem because it is complex and straddles various sectors and levels.

In this context, cross-sectoral management of water, energy, food and ecosystem resources is pivotal to a successful transition to a green economy and sustainable development. Addressing interdependencies is indeed considered essential to achieving the ambitions of the Sustainable Development Goals, the Paris Agreement and the post-2020 biodiversity framework. However, although interest in adaptation to climate change impacts has surged in recent years, the focus has largely remained sectoral, an approach that, if not correctly undertaken, can exacerbate the existing challenges. Therefore, there is a need to shift from

vertical to cross-sectoral approaches that promote circularity in resource management, use, and development. Regarded as a transformative approach, the Water-Energy-Food-Ecosystems (WEFE) Nexus has the potential to address competing demands and facilitate adaptation and development in an integrated manner.

Such potential has not yet been fully recognized, as current climate adaptation strategies, including the National Adaptation Plans (NAPs), have mainly promoted sectoral goals. They generally focus on sectoral and project-based activities without adequate consideration or coordination of cross-sectoral interactions among key climate-sensitive sectors, including water, energy, food and ecosystems.

Sectoral adaptation strategies can undermine net resilience by decreasing capacity or increasing risks in another place or sector, resulting in maladaptation. There is a risk that the benefits of cross-sectoral synergies remain unexplored, especially when seeking to speed-up climate adaptation and mitigation actions. This call aims at filling this gap in the Mediterranean region.

Scope

The call supports the Nexus cross-sectoral concept as a tool in climate adaptation and mitigation strategies by designing and integrating Nexus solutions into existing climate change adaptation plans at the sectoral level and assessing their impact on the livelihoods of populations and the socio-economic performance in the Mediterranean region. Through a multi-actor approach, project proposals should be built at various demonstration sites, preferably located in Mediterranean Partner Countries¹ characterized by diverse climate and agro-ecological and socio-economic conditions with a critical mass of stakeholders, e.g., policymakers, public authorities, farmers, and other end users. Projects should co-deploy WEFE Nexus-based adaptation solutions, including changes in production and management practices (for instance, adapted varieties, mixed cropping systems, agroecological practices, nature-based measures, and renewable energy. Technologies and processes could also be implemented and validated at the demonstration sites, including decision support systems and digital solutions. Proposals should assess the impact of Nexus-based adaptation and mitigation solutions on improving resource efficiency across the Nexus sectors and take a broad perspective by considering the impact on the overall environment and societal well-being. Consortia are expected to develop conceptual and evaluative tools for assessing tipping points beyond which climate change impacts on water, energy and food demand could harm the ecosystem integrity and the socio-economic security in the Mediterranean region. Conditions and opportunities for effective engagement of the private sector should be analyzed, and the ways to promote sustainable market solutions should be demonstrated. To this end, proposals should develop business models targeting the Nexus-based

¹ Mediterranean Partner Countries (MPC) are considered the Third Countries associated to Horizon 2020 (AC): Israel, Tunisia, and Turkey and the Third Countries (TC) having concluded international agreements for scientific and technological cooperation setting out the terms and conditions of their participation in PRIMA: Algeria, Egypt, Jordan, Lebanon and Morocco

adaptation and mitigation solutions, facilitating the roll-out of the piloted innovation at a larger scale across the Mediterranean region.

Ultimately, proposals are invited to offer promising pilots for successfully integrating adaptation and mitigation solutions into cross-sectoral policies. This would enable feedback to decision-makers to revise sectoral adaptation strategies, ensuring a long-lasting adaptation capacity for potentially vulnerable populations.

The objective is to enlarge the PRIMA portfolio of WEFE Nexus projects and case studies. The project proponents should use lessons learned from the Nexus projects funded by PRIMA by developing a close partnership during the implementation of respective projects. The successful consortia are strongly encouraged to participate in the Mediterranean WEFE Nexus Community of Practice created as an outcome of the WEFE Science Advances Conference to stimulate cross-organization collaboration and knowledge sharing in the Mediterranean region.

Due to the specific challenge of this topic, and in line with our principles of allowing maximum participation from Southern Mediterranean Countries to foster both North-South and South- South cooperation, the following additional eligibility criteria apply: "In addition to the minimum number of participants set out in the standard eligibility conditions (section 5.1.3 of the PRIMA Annual Work Plan 2023), consortia must include at least one independent legal entity established in any of the MPCs².

Expected Impacts

- Integrate the Nexus perspective into climate adaptation plans and the adaptation perspective into development plans for better policy integration
- Promote sustainable and inclusive economic development, job creation, and improving the livelihoods of people
- Increase the resilience of marginalised communities
- Strengthen policy integration between Nexus and adaptation mechanisms across sectors at different scales and among the principal actors
- Reduction of poverty, migration and vulnerability of marginalised populations.

Key Performance Indicators

- Number of Nexus-based adaptation and mitigation solutions able to minimize shock,
 risks, and vulnerability and address impacts and risks associated with climate change
- Number of engaged stakeholders and end-users

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• Number of business models of Nexus-based adaptation and mitigation solutions developed

Contribution to EU Policies, HE Mission and partnerships

The proposal should indicate linkages to relevant EU policies and objectives in the context of the European Green Deal, <u>Water Framework Directive (WFD)</u> and relevant <u>EU Missions and Partnerships</u>

Contribution to SDGs

The proposals should indicate their contribution to relevant SDGs and methodology to contribute to reporting SDG indicators

Supporting information for Section 1 call for Proposals, Topic 1.4.1

Type of	Innovation Action (IA)
action	
Total indicative amount allocated to this call	8.2 million
Funding level	According to Horizon 2020 Rules
	70% (except for non-profit legal entities, where a rate of 100% applies)
Technology Readiness	TRL 6-8
levels (TRL)	Proposals should clearly state the starting and end TRLs of the
	key technology or technologies targeted in the project.
Budget and duration of	PRIMA considers that proposals requesting a contribution from
grants	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 submitting
	and selecting proposals requesting other amounts or duration.
Eligibility conditions for	Please refer to section 5.1.1 of the PRIMA Annual Work Plan 2023
participation	for the List of countries eligible for funding.

Specific additional requirements for the calls 2023	Due to the specific challenge of these topics, and in line with our principles of allowing maximum participation from Southern Mediterranean Countries to foster both North-South and South-South cooperation, the following additional eligibility criteria apply: "In addition to the minimum number of participants (3 legal entities) set out in the standard eligibility conditions (mentioned above), consortia must include at least one additional independent legal entity established in any of the MPC. So the eligibility rules can be read as follows: At least four legal entities established in at least three different countries considered as PRIMA Participating States, out of which: -at least one must be established in an EU Member State or a third country associated with Horizon 2020 and not being an MPC -at least two must be established in third country/countries bordering the Mediterranean Sea (MPC): Algeria, Jordan, Israel, Tunisia, Morocco, Lebanon, Egypt, Turkey." Examples: Germany-Greece-Morocco-Turkey is eligible Germany entity 1-Germany entity 2-Greece-Morocco IS NOT ELIGIBLE, lack of the 4 th partner from a MPC France-Algeria-Egypt is NOT ELIGIBLE, lack a 4 th partner that can be from a MPC OR from a EU PRIMA PS
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 submitting and evaluating applications can be found in Table 6 of the PRIMA Annual Work Plan 2023
Evaluation rules	The award criteria, scoring, thresholds and weightings for IAs listed in part <u>5.1.7</u> of the PRIMA Annual Work Plan 2023 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 will be required to conclude a consortium agreement before the conclusion of the PRIMA grant agreement.