



CALL TEXT AND SUPPORTING INFORMATION

Call: Section 1 – Nexus theme 2022

Topic 1.4.1-2022 (IA) Predicting and testing options
of socio-economic adaptation to declining Water-
Energy-Food-Ecosystem (WEFE) resources in the
Mediterranean Region

Topic 1.4.2-2022 (CSA) Development of a
Mediterranean Water-Energy-Food-Ecosystem (WEFE)
Community of Practice


Version 1.0
17 January 2022



The PRIMA programme is supported and funded under Horizon 2020, the European Union's Horizon 2020 research and innovation

Nexus theme

Topic 1.4.1-2022 (IA) Predicting and testing options of socio-economic adaptation to declining Water-Energy-Food-Ecosystem (WEFE) resources in the Mediterranean Region

	<p><i>SRIA priorities addressed</i></p> <p>WEFE Nexus</p> <p>Topic 1.4.1 address</p> <p>Priority 1.2 Water sustainability in the Mediterranean Region should be ensured through improved technical tools coupled with <u>socio-economic tools and governance, organisational and/or business models</u> to define water-use limits in certain key areas under present and future global change scenarios.</p> <p>Priority 1.4 Use of alternative water resources</p> <p>Priority 2.2 Developing sustainable and productive agro-ecosystems</p> <p>OPERATIONAL OBJECTIVES</p> <ul style="list-style-type: none">- 2/LAND AND WATER SUSTAINABILITY- 4/ SMART AND SUSTAINABLE FARMING- 7/ REDUCE LOSSES AND WASTES
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Challenge

Climate change and population growth projections are on a collision path in the Mediterranean Region. Concern on how long continuing along this path can be sustained is growing. The combined action of these drivers will impinge on water availability, energy consumption, agricultural productivity and ecosystem health:

- Water is the medium through which the consequences of climate change extremes – droughts and flash floods - are directly felt by people
- Cooling needs of thermo electric generation may no longer be met, thus making the grid unable to supply households and industries with the required power
- Higher seasonal temperatures can significantly impact agricultural productivity by increasing evaporative water losses and the heat stress on crops
- Mediterranean ecosystems are likely to be pushed past critical thresholds and altered in an unprecedented way, thus degrading their capacity to deliver services to society.

Beyond immediate or delayed effects on the biophysical state of Water, Energy, Food and Ecosystems resources, which have been considered in previous PRIMA calls, the focus of this call will be on the socio-economic impacts of a Nexus approach to the governance of WEFE resources. The livelihood insecurity and inequalities deriving from local resource scarcity in the Mediterranean Region might be push factors for the internal displacement of populations into nearby urban centres. This is especially true in rural areas where the farming-based livelihoods of smallholders are more likely to be affected. Where not well managed, urbanisation can create other challenges,

including human health and the labour market, change in consumption patterns, loss of traditions and culture. Agriculture may take a back seat and be unable to cope with mounting pressure on rural hinterlands for food provision amid an increasing dependency on food crop import. At the same time, local employment, better health, improvement of life standard, income development and community development can be achieved by the proper usage of energy. Cross-sectoral (Nexus) policy actions striking a balance between the competing goals of the water, energy, food and ecosystem sectors are needed now as a precondition to prompt adaptation of the Mediterranean supply systems of WEFE resources safe net against projected changes and rise of inequality.

Scope

The call supports the development of strategies and policies that boost populations' capacity to adapt to dwindling Water-Energy-Food-Ecosystem (WEFE) resources in the Mediterranean Region. As declining WEFE resources tends to emerge slowly over time, making a connection with socio-economic impacts is not immediately distinguishable from acute events. Given the need to plan for the future in the present, early identification of causal connections between socio-economic impacts and measures to build local resilience of WEFE resource management is necessary. To this end, proposals should be built around Nexus demonstration cases as socio-innovative adaptation experiments in different contexts. By analysing WEFE production and consumption structures, proposals should identify their impacts on the life-supporting abilities and local communities' social and economic performance under climate change and demographic constraints. Actions would address the interplay of impacts, for example, of disruption of regional and international trade flows of food crops, on people's displacement. In particular, actions could explore the associations between the trading of crop products and local usages of water, energy, ecosystem resources under different scenarios. Specific methodologies are necessary for the co-development in a participatory approach of transformative Nexus solutions as a potential strategy of people's adaptation to the intensification of resource scarcity. Outcomes should then be translated into WEFE resource-related indicators to monitor these strategies' qualitative and quantitative impacts and provide hints for possible futures. This would enable feedback to decision-makers to develop Nexus policies and strategies, ensuring a long-lasting adaptation capacity of potentially vulnerable populations.

Extensive involvement of stakeholders and right holders is necessary to make projects also social innovative experiments. The project's evaluation will emphasise explicit KPIs to ensure quantifiable outcomes. The project proponents should identify potential synergies with other PRIMA, H2020 and Horizon Europe projects. The successful consortia should take part in the Mediterranean WEFE Nexus Community of Practice created as an outcome of the [WEFE Science Advances Conference](#) to stimulate cross-organisation collaboration and knowledge sharing in the Mediterranean Region.

Expected impacts

- Integration of Nexus considerations into public and business decision-making at different governance levels through innovative toolboxes and guidelines supporting policymakers and practitioners in the implementation of adaptation strategies
- Increase resilience to climate change, ensuring good quantitative and qualitative status of water, sustainable agriculture, food and energy production, and healthy ecosystems
- Increase the socio-economic livelihood conditions of vulnerable populations
- Share best Nexus practices across disciplinary silos in a context of combined natural, economic and social systems

Key Performance Indicators

- Degree of integration between water related policies, such as environmental, climate, agriculture and energy policies
- Number of stakeholders involved in innovative experiments
- Number of Nexus demonstration cases as socio-innovative adaptation experiments in different contexts

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, [Water Framework Directive \(WFD\)](#) and relevant [Horizon Europe Missions and Partnerships](#)

- [Farm to Fork Strategy](#)¹
- [Biodiversity Strategy](#)²
- [Horizon Europe Mission on Soil Health and Food](#)
- European Partnership Water Security for the Planet (Water4All)

¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system"

² Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "EU Biodiversity Strategy for 2030 Bringing nature back into our lives"

- 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 Partnership for rescuing biodiversity to safeguard life on Earth


Links with SDGs

Indicate links with the relevant SDG target.

Supporting information for Section 1 call for Proposals, Topic 1.4.1

Type of action	Innovation Action (IA)
Total indicative amount allocated to this call	Approx. EUR 6.2 million
Funding level	According to Horizon 2020 Rules 70% (except for non-profit legal entities, where a rate of 100% applies)
Technology Readiness levels (TRL)	TRL 6-8 Proposals should clearly state the starting and end TRLs of the key technology or technologies targeted in the project.
Budget and duration of grants	PRIMA considers that proposals requesting a contribution from the EU in the range of EUR 3.1 million and with a duration of 36 months would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude 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 IAs 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 will be required to conclude a consortium agreement before the conclusion of the PRIMA grant agreement.

Topic 1.4.2-2022 (CSA) Development of a Mediterranean Water-Energy-Food-Ecosystem (WEFE) Community of Practice

	<p><i>SRIA priorities addressed</i></p> <p>WEFE Nexus</p> <p>Topic 1.4.1 address Priority 1.2 Water sustainability in the Mediterranean Region should be ensured through improved technical tools coupled with <u>socio-economic tools and governance, organisational and/or business models</u> 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</p> <p><u>OPERATIONAL OBJECTIVES</u></p> <ul style="list-style-type: none">- 2/LAND AND WATER SUSTAINABILITY- 4/ SMART AND SUSTAINABLE FARMING- 7/ REDUCE LOSSES AND WASTES
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Challenge

Increasing climate warming and populations are projected to place additional pressure on the availability of food, energy and water in the Mediterranean Region. Implications for the future of ecosystems and biodiversity are equally daunting, impacting the supply of ecosystem services and goods to people. Improving countries' preparedness to tackle the socio-economic vulnerability and resilience of the Water, Energy, Food, Ecosystems (WEFE) sectors will require greater alignment between agricultural, energy and nature management options and policies. Moving away from sectoral silos towards an enhanced cross-sectoral collaboration in the deployment of WEFE Nexus solutions is essential to alleviate the situation and pave the way for a green economy and achievement of the Sustainable Development Goals. This approach needs a robust coordination mechanism where key stakeholders can better identify and prioritize solutions together, benefitting from an overall Nexus perspective.

Gathering scientists, practitioners, policymakers, investors, and other stakeholders in a Mediterranean WEFE Nexus Community of Practice (NCoP) was recognized during the 2021 WEFE Nexus Science Advances Conference as a way to link the supply of evidence to its demand. An initiative for a Community of Practice would provide stakeholders with convincing evidence of the benefits of the WEFE Nexus approach in the region as a basis for decision-making, decreasing the resistance to the practical deployment of a cross-sectoral Nexus approach in the management of natural resources in the Mediterranean Region.

Scope

Proposals are expected to contribute to the establishment of a Mediterranean WEF E Nexus Community of Practice (NCoP), which is envisaged to:

- Promote the identification and communication of WEF E Nexus best practices and technical solutions
- Act as an effective and sustainable forum/platform to attract and stimulate collaboration and knowledge sharing across stakeholders
- Interface science, policy and practice around WEF E Nexus demonstration cases as socio-innovation experiments in the Mediterranean Region.

The NCoP should be built around a network of existing WEF E Nexus demonstration cases³ to disclose and make available explicit and tacit knowledge spread across the Mediterranean Region. Demonstration cases will be a distinctive feature of the NCoP, which will be more than a meeting place, but a space for learning together by directly channelling hands-on experience on applying a Nexus approach directly from demonstration cases to the table of decision-makers. Proposals are not expected to develop new demonstration cases but to take stock of the state of play in research and practice by connecting with existing relevant projects and networks.

The NCoP should involve practitioners, scientists, national-level programme teams as well as members from inter-governmental bodies, non-government (NGOs) and civil society (CSOs) organizations, who will exchange data and best practices from hands-on demonstration actions providing evidence of the economic and socio-ecological benefits of the WEF E Nexus approach. By raising awareness among stakeholders, the CSA will help increase the implementation of the outcomes and support further uptake of the NCoP.

In collaboration with selected organisations, PRIMA-IS will steer the overall activities of the NCoP Community of Practice. In cooperation with PRIMA, the CSA will be responsible for building and engaging intensely in the Community by promoting discussion and projects. The CSA will assist PRIMA in identifying priority areas and types of activities that should be taken to ensure a self-sustainable Community of Practice. The details of these coordination activities will be defined with PRIMA during the grant preparation phase.

Proposals should set out a plan on how to:

³ A WEF E Nexus demonstration case is an area where innovative technologies, processes, management and governance models, including decision support system tools, digital solutions, data infrastructure, demonstrating the economic, social, environmental benefits of a WEF E Nexus approach are implemented and validated

- Run a Mediterranean WEFE Nexus community of practitioners, innovators and local implementing authorities to promote the development, replication and upscaling of WEFE Nexus solutions at regional scale.
- Identify, attract and federate demonstration cases beyond the partnership of the consortium in order to ensure as much as possible the regional coverage of the Community of Practice with a critical mass of actors.
- Analyse the respective roles of scientists, local authorities, communities, and potential investors in developing governance models in the demonstration cases.
- Propose NCoP engagement measures to mobilize a diversity of institutional, research and local actors to learn from and support each other in providing solutions to overcome sectoral fragmentation in decision-making.
- Analyse and develop recommendations on how to promote the adoption of Nexus best practices accounting for regional specificities.
- Develop a mechanism for capacity building and Nexus knowledge transfer, including communication, outreach, stakeholder events and awareness-rising campaigns in Mediterranean countries.
- Instruments such as a NCoP Knowledge Hub should be developed to gather, evaluate and synthesise research outcomes for the Mediterranean Region, facilitate the exchange of information and data and provide support and advice to the NCoP members.

Expected impacts

In the long term

- To foster the shift from sectoral Water, Ecosystems, Food and Energy management towards an integrated resource-use approach in the Mediterranean Region by sharing knowledge on the Nexus approach
- To enable a long-lasting cooperation within and between demonstration areas for the development of scientifically validated socio-innovative adaptation and mitigation measures

In the short term

- To promote/support the deployment of regional demonstration cases as laboratories for scale-up and policy design
- To contribute to the development, testing, dissemination and replication WEFE Nexus solutions in the Mediterranean Region and beyond

Key Performance Indicators

- Degree of integration between water-related policies, such as environmental, climate, agriculture and energy policies
- Number of stakeholders involved in the NCoP
- Number of Nexus demonstration cases actively engaged in the NCoP

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](#)

Links with SDGs

- Indicate links with the relevant SDG target.

Table 5. Supporting information for Section 1 call for Proposals, Topic 1.4.2

Type of action	Coordination and Support Action (CSA)
Total indicative amount allocated to this call	Approx. EUR 2 million
Funding level	According to Horizon 2020 Rules Funding rate 100%
Budget and duration of grants	PRIMA considers that proposals requesting a contribution from the EU in the range of EUR 2 million and with a duration of 48 months would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude 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 single-stage submission process. <u>The page limit for a CSA proposal is 30.</u> 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 CSAs 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 will be required to conclude a consortium agreement before the conclusion of the PRIMA grant agreement.

