



CALL TEXT AND SUPPORTING INFORMATION

Call: Section 1 – Water Management 2022

Topic 1.1.1-2022 (IA) Sustainable and integrated
management of natural and artificial water storage
systems and distribution infrastructure

Version 1.0
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Thematic Area water management

Topic 1.1.1 (IA) Sustainable and integrated management of natural and artificial water storage systems and distribution infrastructure

	<p><i>SRIA priorities addressed</i></p> <p>Topic 1.1.1 refers to Priority 1.2 Sustainable integrated water management.</p> <p>Water sustainability in the Mediterranean Region should be ensured through improved technical tools and socio-economic studies to define water and energy use limits in critical areas under present and future global change scenarios.</p> <p><u>OPERATIONAL OBJECTIVES</u></p> <ul style="list-style-type: none">- 2/LAND AND WATER SUSTAINABILITY- 3 WATER GOVERNANCE SYSTEMS
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Challenge

The chronic water scarcity situation in the Mediterranean Region is a consequence of the seasonal mismatch between water sources and demand and the overexploitation of water resources and could be exacerbated due to the effects of climate change.

While efforts are in due course for a more efficient agricultural water demand and the use of non-conventional resources is increasing, the proper management of natural (through Nature-Based Solutions), artificial water storage, and distribution systems can be improved. This approach should go beyond the engineering construction phase focusing on the efficient management and operation of the existing infrastructures, natural bodies and management mechanisms. Water distribution within the agri-food value chain should be mainly targeted as one of the main areas of water misuse. This is because water distribution issues are linked to water losses at the micro- (farm/ rural) and macro-level (basin/ regional). By integrating on-farm and site-specific solutions at a basin scale it should be possible to improve the water footprints in the entire area of study. This large-scale assessment is indeed needed to ensure the long-term sustainability in the management of the water-source balance.

Scope

Proposals should look into the integrated water resource management aspects by specifically dealing with the water storage and distribution system challenges through innovative technologies and solutions, when possible, nature-based, and considering

the effects of climate change. The specific goal is to improve the water storage and distribution capacities in representative demo areas through a combination of soil-water conservation practices integrated into appropriate management regulations. Particular attention should also be given to the governance aspects to understand and deal with the issues of multi-functionality in water use and distribution and water network efficiency (including the use of ICT solutions to improve management of water networks) within the agri-food sector, avoiding water losses optimising the water storage potential. The entire water cycle (winter/summer) should be considered when approaching dams and reservoirs, including the proper soil and water conservation upstream of the water storage resources. This is required to ensure the optimum and efficient functioning of the entire water regulating infrastructure. The potential capabilities of natural wetlands for storing and purifying water sources should be better valorised, finding optimum equilibrium between ecological water flow and storage and water use by different economic sectors and particularly by the agri-food industry. This requires a more holistic approach under circular economy perspectives and the whole-year water cycle considering the potential roles of natural wetlands for water retention during the wet part of the seasons, water treatment and purification. Environmental and cost-benefit indicators should be determined to assess the convenience of proposed measures considering different perspectives on water resource management.

Expected impacts

- Improvement of the availability of water resources through the optimisation of the management, operation and conservation of natural and artificial water storage systems and water distribution infrastructure;
- Reduction of sedimentation in water storage facilities adopting soil and water conservation practices;
- New ecological methods for the design of nature-based solutions based on the seasonal water balance;
- Improvement of the management of natural wetlands for ecological water conservation, water treatment and re-use and water storage.
- Better designed Nature-Based-Solutions to include the whole summer/winter water cycle;

Key Performance Indicators

- Number of demonstrators
- New practices for end-users
- Degree of integrated water resources management implementation (0-100)
- Change in the extent of water-related ecosystems over time

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: Restore our Ocean and Waters](#)
- European Partnership Water Security for the Planet (Water4All)
- 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

The proposal should indicate linkages to relevant UN SDGs and methodology to contribute to the reporting of SDGs indicators

- TARGET 6.4 By 2030 substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- TARGET 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- TARGET 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

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"

Supporting information for Section 1 call for Proposals, Topic 1.1.1

Type of action	Innovation Action (IA)
The total indicative amount allocated to this call	EUR 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 levels (TRL)	TRL 6-8 Proposals should clearly state <u>the starting and end TRLs of the key technology or technologies targeted in the project.</u>
Budget and duration of 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. 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 .
Grant agreement	The award criteria, scoring, thresholds and weightings for IAs listed in part 5.1.7 will be used. 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 PRIMA grant agreement's signature.