
Terms of reference

Path4Med

Demonstrating innovative pathways addressing water and soil pollution in the Mediterranean Agro-Hydro-System

Expert in implementation of innovative and sustainable practices on effective management of irrigation water and soil

The Mediterranean Agronomic Institute of Montpellier (CIHEAM Montpellier), one of the four institutes of the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), is an intergovernmental organization whose mission is the development of higher education and lifelong learning, research and cooperation in the Mediterranean area. Within the scope of the Path4Med Project, Horizon Europe n°101156867, CIHEAM Montpellier offers a position of expertise in implementation of innovative food and sustainable food systems.

1. Context

Path4Med (<https://www.path4med.eu/>) is a multi-participatory and multidisciplinary project that will pave clear pathways towards zero water and soil pollution in the agro-hydro-system of the Mediterranean Sea basin and other European seas through an innovative triple bottom line approach achieving economic, social, and environmental sustainability to ensure human well-being and ecosystems functioning. Path4Med will advance and consolidate agricultural management technologies and solutions within an inclusive and open participatory environment, it will evolve and mainstream novel monitoring technologies and integrated solutions, it will assess the technical feasibility and socioeconomic viability of cascades of solutions through an integrated modelling framework, it will quantify the effectiveness and the net impact of these solutions, and ultimately it will empower Citizens to take action against pollution of soils, waters and the ocean, through clear measurable evidences, increased awareness, and water literacy. Path4Med pathways will be applied and demonstrated in large scale, integrated, Demonstration Sites established in representative Mediterranean areas, in areas representing other European seas and in associated regions. A digital platform and other relevant digital tools will be established to facilitate Path4Med actions, information and knowhow communication, and to support data exchange and data feeding to international Observatories and Knowledge Systems.

2. Description of the work package and tasks

As part of the Path4Med project, CIHEAM-IAMM is the leader of the French Demonstration Site (DG7) located in Mauguio (south-east of France). Its scientific team is developing a decision-making support tool at the level of the watershed Etang de l'or for better allocation of irrigation water and to reduce water and soil pollution. Its main missions are: i) to perform a farm-scale evaluation through the DAHBSIM model to assess farmers decision-making towards the adoption of novel practices or policy measures; ii) to test novel solutions at field

and watershed scale, such as climate smart agriculture, precision/informed irrigation management, nutrients management, NBS, etc.; and iii) to assess irrigation water abstractions and drainage water fluxes coupled with site-specific meteorological observations. All these activities are linked with WP2, WP3, WP4, WP5 and WP6.

To assure the quality of these tasks' implementation, an expert (service provider) in implementation of innovative and sustainable practices on effective management of irrigation water and soil is needed to support CIHEAM Montpellier team.

3. Description of main tasks required

The role of the expert will be to contribute to the reflection and implementation of French Demonstration Site, particularly in supporting two key aspects: "acquiring the necessary data" and "working closely with farmers, cooperatives, and other key actors to understand their roles, challenges, and opportunities for collaboration".

The expert's service will be essential in analyzing and facilitating the execution of different project tasks in the targeted areas. More specifically, he/she will be requested to:

- ❑ Identify and categorize the broad range of stakeholders involved in soil and water management and the diffusion of innovative techniques.
- ❑ Identify the bottlenecks that hinder the adoption of innovative irrigation techniques designed to improve productivity at the primary production level while preserving biodiversity.
- ❑ Assess the potential of stakeholders, particularly farmers and cooperatives, to adapt novel solutions at field and watershed scale and analyze the perceived risks and uncertainties that may affect their willingness to adopt new techniques.
- ❑ Improve stakeholder performance and collaboration to provide additional inputs and evaluate several outcomes.
- ❑ Collect specific data and facilitate access to specific databases for modeling.
- ❑ Evaluate the results of the bioeconomic model (DAHBSIM model) to identify strategies for increasing profitability, resilience, and sustainability in the sector.
- ❑ Contribute to the development of tailored recommendations to facilitate the uptake of sustainable and profitable irrigation practices.

These activities will directly support the project's overarching goal of ensuring the economic and environmental sustainability of the innovative practices and policy measures. The expert will play a pivotal role in the implantation of the French Demonstration Site.

4. Deliverables

- ❑ Conduct targeted interviews with local stakeholders to gain a better understanding of representative farming systems.
- ❑ Organize at least 2 focus group (or participatory workshops) with different stakeholders in the French Demonstration Site.
- ❑ Mini-reviews (report) and data sets that cover various, new, and innovative and sustainable agricultural practices and policy measures.

5. Duration

The overall execution period of these tasks is for one year (from 02/05/2025 to 30/04/2026) and the requested tasks require a maximum of 4 days of expertise per month.

Please note that the service will be paid for on the basis of monthly invoices for the duration of the contract.

6. Required qualifications

The expert must meet the following requirements:

- At least 3 years of prior experiences in similar studies
- Experiences in organizing workshops and seminars
- Knowledge in the Mediterranean agricultural field and rural and agricultural development in the Mediterranean is a plus

7. Confidentiality- Conflict of interest

The Expert will be expected to sign a Non-Disclosure Agreement and a Declaration of an absence of Conflict of Interest to warrant independence and the provision of fair ethical judgements and expertise.

The Expert will maintain regular contact with the Project team in CIHEAM-IAMM.

8. Submission of proposals and main criteria for evaluation

Interested applicants are invited to submit the following:

- CV detailing relevant previous experience;
- A **cover letter** concerning the missions defined in the expertise description;
- A quotation including a breakdown of the main planned tasks (see annex 1).

Please note local travel expenses must be included in the expert quotation. Only participation in seminars and workshops abroad can be supported by the project.

The application **must be written in English**.

Deadline for Submission: **16th of April 2025**

Selection Committee: **18th of April 2025**

Starting Date: **2nd of May 2025**

The application file must be sent by email with the following object " "Path4Med **expert** " to emploi@iamm.fr

Contact for any information on the project: Georgios Kleftodimos - kleftodimos@iamm.fr

Main criteria for evaluating the proposals will be: the qualification of the candidate, relevant experience, cover letter quality and price.

The selection process may include interviews (through Zoom or phone), as well as a pre-selection phase followed by requests for complementary information / negotiation if required.

The selected service provider will be issued a contract with the CIHEAM-IAMM specifying the final delivery and completion schedule for the planned tasks, as well as the terms of payment.

ANNEX 1: Example for quotation

Nº	Description	Unit cost (in euros)	Quantity (for example: number of days; number of trips...)	Total cost in € excluding tax	Cost in €, including tax
Identify and categorize the broad range of stakeholders involved in soil and water management and the diffusion of innovative techniques.					
1	(For example: travel....)				
2					
Identify the bottlenecks that hinder the adoption of innovative irrigation techniques designed to improve productivity at the primary production level while preserving biodiversity.					
1					
2					
Assess the potential of stakeholders, particularly farmers and cooperatives, to adapt novel solutions at field and watershed scale and analyze the perceived risks and uncertainties that may affect their willingness to adopt new techniques.					
1					
2					
Improve stakeholder performance and collaboration to provide additional inputs and evaluate several outcomes.					
1					
2					
Collect specific data and facilitate access to specific databases for modeling.					
1					
2					
Evaluate the results of the bioeconomic model (DAHBSIM model) to identify strategies for increasing profitability, resilience, and sustainability in the sector					
1					
2					
Contribute to the development of tailored recommendations to facilitate the uptake of sustainable and profitable irrigation practices					
1					
2					
TOTAL COST					