Service GRH Ref. : 24/32



Recruitment of a PhD candidate in Economy

Three years full-time PhD contract,

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 NPP-SOL project, CIHEAM Montpellier offers the position of a PhD candidate.

### **CONTEXT**

The PhD fellow position will be funded to conduct scientific research applied to the subject of climate change and adaptation of agricultural systems and risk management. We have selected the Mediterranean region as a study area because it is expected to be among the most negatively affected by Climate Change. This area has also been selected, because of the over and unsustainable use of natural resources and inputs to increase agricultural production in order to meet population's food needs.

This context makes it urgent to i) assess the baseline situation by analyzing the socio-economic and environmental performances of current agricultural systems, and then ii) co-design and evaluate the impacts of the implementation of technological innovations (such as agroecology, bioreactors and constructed wetlands, etc.) and policies aimed at promoting more efficient, sustainable and productive agricultural systems.

The PhD candidate will play an active role in some of the CIHEAM-IAMM research projects and initiatives (such as NPP-SOL) which will provide field data for the PhD thesis.

#### Job description

The adaptation to climate change in agricultural systems is always treated as a stand-alone activity (usually as a technical solution). However, farmer's decision is more complicated and should considered different constraints (biophysical, socio-economic, environmental, and legislation) when it comes to developing suitable adaptation strategies to global climate change and reducing natural resources use and pollution. To reach a compromise solution, a trade-off among costs and benefits of different criteria (economic, social, environmental etc.) should be estimated.

The present PhD aims at developing and using a multi-scale and quantitative approach for assessing adaptation strategies for different Mediterranean regions in different farming systems and biophysical conditions (France, Spain, Italy). More concretely, the PhD will use/develop the DAHBSIM modeling chain. This modeling chain will be used to assess alternative adaptation strategies in the socio-economic, policy and technological innovations context of the selected farm types. Economic (farmer's revenues) and environmental (changes in the stock and renewal of soil and water resources and pollution reduction) effects will be investigated for farms and fields. In addition, risks and uncertainty about weather, price, policy and market will be also included in the assessment and the adoption of technological innovation. The compatibility and acceptability of alternative technological innovations and policies to promote

adaptation will be investigated using a pre- and post-modelling approach. Participation of stakeholders is possible through collaboration with national and international projects.

#### Qualifications

The candidate has completed an MSc in a relevant domain (e.g. Natural resource economics), he/she has proven capabilities in systems analysis, simulation modelling and other quantitative methods, he/she has experience with literature research and computer programming languages and is fluent in English with good writing skills. The candidate is able to communicate well with fellow researchers in similar and other relevant disciplines.

#### PERSONAL SKILLS REQUIRED

- Excellent organizational skills, ability to establish and maintain lasting and constructive formal relationships;
- Dynamism, reactivity and autonomy;
- Excellent skills of writing and synthesis (work plans, technical reports and other acts and management, ordinary correspondence, notes, messages, summary sheets);
- Good teamwork abilities, particularly in a multicultural and multi-disciplinary context;
- Ability to propose solutions to problems and critical issues that might arise during the project.

### JOB SPECIFICATIONS

- Contract duration: fixed term contract of 36 months;
- Full-time (37,5h per week);
- 8 weeks' annual leave;
- Salary: According to CIHEAM-IAMM index payroll;
- Location: Mediterranean Agronomic Institute of Montpellier (Route de Mende, Montpellier, France) with occasional travels in different partner countries.

Contact for any information on the announcement: <u>kleftodimos@iamm.fr</u>

CIHEAM Montpellier is committed to a policy of non-discrimination and gender. Position open to people with disabilities.

## SELECTION PROCESS

The application must be written in English and include a CV and a cover letter concerning the missions defined in the job description.

Deadline for Submission: 18th of November 2024

Selection Committee: 22th of November 2024

# Starting Date: 2<sup>nd</sup> of December 2024

The application file must be sent by email with the following object " PhD candidate in Economy " to <u>emploi@iamm.fr</u>