



**ICAAM (Institute for Mediterranean Agrarian and Environmental Sciences)
University of Évora**

Announcement of one Post-Doc Research Fellowship within the framework of the project: “Small Farms, Small Food Businesses and Sustainable Food Security (SALSA)”, H2020 grant agreement No 677363

15nd March 2016

A call is open to award 1 Post-Doc Research Fellowship under the project “Small Farms, Small Food Businesses and Sustainable Food Security (SALSA)”, ref. nº 677363, funded by the European Union in the scope of the H2020 Program, call H2020-SFS-2015-2, under the following conditions:

Scientific domain: Remote Sensing and Spatial Analysis applications in Environment and Agricultural Sciences.

Admission requirements: Candidates will be admitted to the call when demonstrating: (i) a university degree in Biophysical Engineering or equivalent (ii) a PhD degree with the thesis focused on Remote Sensing Applications to Mediterranean land cover; (iii) a solid record of scientific publication in International Journals with referees.

Preferential factors for admission:

- Proved experience in remote sensing applications applied to complex landscape patterns in the Mediterranean region, particularly silvo-pastoral systems;
- Experience on digital image processing applied to South Portugal landscapes;
- Research experience with GIS and spatial modelling
- Experience with machine learning applications in earth observation data;

Training and or experience with the use of R software tools for statistical modelling, spatial analysis and satellite image processing is required. Fluency in English and Portuguese is an advantage.

Work Plan: SALSA has been designed to meet the significant intellectual and practical challenge of developing a better understanding of the current and potential contribution of small farms and food businesses to Food and Nutrition Security (FNS) in an increasingly globalised and uncertain world. The project will pay particular attention to: capturing the diversity of food systems and small farm situations in Europe and Africa; looking beyond production capacity to include all four dimensions of FNS; fully considering the gradient of socio-economic conditions in different regions of Europe and Africa, and; fully

and effectively engaging with stakeholders to cut across classical boundaries in food system structures and situations, Europe-Africa relations, research, policy and practice.

The Research Fellow will be focused on the Work Package (WP2) “**Estimation of the distribution and production capacity of small farms**”. WP2 aims to use the recent advances in satellite technology in combination with official agricultural statistics and land cover data in an innovative approach to analyse the distribution and spatial characteristics of small farms. Specifically the research fellow will coordinate, develop and implement the following tasks:

- Produce a European-level map of the estimated distribution of small farms at the NUTS 3 level, that will consider all types of small farms;
- Select 30 reference regions – 25 NUTS 3 regions in Europe and five equivalent types of region in Africa;
- Provide information on the spatial characteristics and estimated production capacity of small farms in the reference regions in Europe and in Africa, using the detailed information from SENTINEL-2 satellite images, combined with field information;
- Assess the effectiveness of using the SENTINEL-2 satellite images for assessing and monitoring small farms in Europe and in Africa with validated methodological guidelines.

This will involve the collection and processing of SENTINEL-2 images and ancillary data, to produce a ground-truth dataset for model training and validation, the development and use of image classification techniques for small farms mapping, and the preparation of scientific manuscripts.

Relevant legislation and regulation: This scholarship will be carried on the basis of a signed contract between the University of Évora and the scholarship recipient, under the terms of the Research Scholarship Regulations of the University of Évora (Ordem de Serviço nº1/2011), the Scientific Research Grant Holder Statute (Law nº40/2004 of the 18 of August and Decree-Law nº202/2012 of the 27 of August) and according to the Regulations and legislation for advanced training and qualifications for human resources of the Fundação para a Ciência e a Tecnologia (FCT). (www.fct.pt/apoios/bolsas/regulamento.phtml.pt).

Place of work: The work is to be developed at the ICAAM, Polo da Mitra of the University of Évora.

Length of the scholarship: One year, beginning in 21th April 2016, renewable for a maximum of one year.

Payment: According to the scholarship values applied by the Portuguese Research Foundation (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>): the monthly payment is of 1495 Euros, not subject to taxes, and the contribution to the national social-medical insurance is paid by the project. The payment

is done by cheque or bank transfer on a monthly basis.

(<http://alfa.fct.mctes.pt/apoios/bolsas/valores>)

Selection: The selection is done based on the documentation sent, mainly the analysis of the CV. An interview may be required. The interview will be used to select between candidates equally ranked. When the candidates are not available to come to Évora, the interview may be undertaken using skype.

Selection Comitee: Professor Maria Teresa Amado Pinto Correia; Professor Nuno Manuel Cabral de Almeida Ribeiro; Professor Maria Paula Duarte Simões; Professor Gottlieb Basch; Professor Fátima de Jesus Folgôa Baptista

Announcement of results: The results will be published through a ranked listed and disposed at the entrance of Colégio de Regentes Agrícolas do Núcleo da Mitra da Universidade de Évora. The candidates receive the information by e-mail.

Period for the call and presentation of application: The call is open in between the 16th March and the 31th March 2016, and the results will be announced until the 1th April 2016.

The submissions may be done through a motivation letter, a CV, relevant certificates, sent to Prof.^a Doutora Teresa Pinto Correia - mtpc@uevora.pt

