

**Unité Mixte de Recherche SMART-LERECO**

Economics Research Unit on Structures and Markets in Agriculture, Resources and Territories

Laboratoire d'Études et de Recherches en Économie sur les Structures et Marchés Agricoles, Ressources et Territoires  
4, allée Adolphe Bobierre, CS 61103, 35011 Rennes cedex, France

Tél. : + 33 (0) 2 23 48 53 82 Fax : + 33 (0) 2 23 48 53 80

**PhD student position in agricultural economics - Economic organisation and Sustainability**

The SMART-LERECO research unit is seeking a PhD student for a three year scholarship located in Rennes, France. The PhD student will be employed by INRA, the French national institute of agricultural research (<http://www.inra.fr/en>)

The SMART-LERECO research unit includes researchers from INRA and lecturers from the agricultural university AGROCAMPUS OUEST. SMART-LERECO's main research interests relate to the analysis and evaluation of public policies in the fields of agriculture, food industry and environment. The unit is spread on three locations (Rennes, Angers, Nantes) but the PhD student will be located in Rennes. ([http://www6.rennes.inra.fr/smart\\_eng/](http://www6.rennes.inra.fr/smart_eng/))

**PhD research topic**

Animal production highly contributes to food products' carbon footprint (its contribution ranges between 80% and 90% for dairy products, 95% for beef meat, and between 75% and 90% for pork meat). However, environmental impacts vary across agricultural production systems (conventional agriculture, organic farming, ...) and across food supply chains. For instance, poultry and hog productions contribute less to greenhouse gas emissions than grazing livestock production. There are three ways for food supply chains to reduce their environmental impacts: (1) to develop agricultural extension services in order to favour ecological practices and to improve farm performance and sustainability; (2) to invest in R&D and encourage the adoption of new technology; and (3) to differentiate food products and exploit consumers' willingness to pay for food products that are more environmentally-friendly. Incentives can be provided by public policies (taxation, subsidies, minimum quality standards) but can also be found within the economic organisation of food supply chains, e.g. national brands, labelling or common R&D. Nevertheless, some barriers still exist at farm level such as farm financial constraints, low skills on sustainable practices, high income risk or low market access for those differentiated products.

The PhD objective is to analyse how contracting and other vertical coordination schemes (producer organisations, agricultural cooperatives) influence the adoption of ecological practices by farmers, and improve the multidimensional performance of farms, and in the longer term their sustainability. Theoretical and empirical work will be carried out during the PhD. Theoretical modelling will be based on industrial organisation theory and agricultural economics, and will consider the impact of various public policies. The empirical application will be based on panel data at the farm level for French pig farms. The French pig farming sector faces major economic and environmental challenges, due to the prevailing of producers' organisations and high livestock pollution.

**Formal requirements**

A Master diploma in agricultural economics, economics, or econometrics is expected by the end of September, 2018. Knowledge of advanced English is necessary as the PhD will be conducted in English. Knowledge of French is not required.

## PhD Supervision

The PhD will start on November 1<sup>st</sup>, 2018 in Rennes. The PhD will be supervised by Sabine Duvaleix-Tréguer, lecturer in AGROCAMPUS OUEST, and Laure Latruffe, researcher in INRA.

[https://www6.rennes.inra.fr/smart\\_eng/Personnal-webpages/Members/Duvaleix-Treguer](https://www6.rennes.inra.fr/smart_eng/Personnal-webpages/Members/Duvaleix-Treguer)

[http://www6.rennes.inra.fr/smart\\_eng/Personnal-webpages/Members/Latruffe](http://www6.rennes.inra.fr/smart_eng/Personnal-webpages/Members/Latruffe)

The PhD will take place in the frame of the European research project LIFT ('Low-Input Farming and Territories – Integrating knowledge for improving ecosystem-based farming'). The project, which started on May 1<sup>st</sup>, 2018, is financed by the European Union's H2020 framework. The PhD will contribute to LIFT analyses on the adoption incentives for transition to ecological approaches in agriculture. The PhD student will work in interaction with researchers of the other European teams of the LIFT project. The PhD is funded by the LIFT project (50%) and the Brittany Region (50%).

## How to apply

Interested candidates should send their application in English to [sabine.treguer@agrocampus-ouest.fr](mailto:sabine.treguer@agrocampus-ouest.fr) and [laure.latruffe@inra.fr](mailto:laure.latruffe@inra.fr). The deadline for applications is June 15<sup>th</sup>, 2018 at noon. Candidates are advised to be available for a skype or video interview between June 21<sup>th</sup> and June 29<sup>th</sup>, 2018.

Please include a cover letter, a CV, contact information of at least one professional referee, a copy of the Master diploma, the Master thesis, and published articles if available and transcripts of records with a description of the grading system.

For more information, candidates can contact Sabine Duvaleix-Tréguer ([sabine.treguer@agrocampus-ouest.fr](mailto:sabine.treguer@agrocampus-ouest.fr)) and Laure Latruffe ([laure.latruffe@inra.fr](mailto:laure.latruffe@inra.fr)).