



The Institute of Farm Economics of the Johann Heinrich von Thünen-Institut, Federal Research Institute for Rural Areas, Forestry and Fisheries, in close cooperation with the Thünen Institute of Biodiversity and Institute for Rural Studies, is looking for

**two scientists (f/m/d)
in the fields of environmental science (natural conservation, geography, agroecology) or
agricultural science (agricultural economics, economic and social sciences of agriculture)**

Both are full-time job openings for **36 months** located in Braunschweig, expected to start on **October 1st, 2024**, or **earlier**. Both positions are related to the ongoing international research project "Brightspace". The project started in 2023 and aims to develop efficient and sustainable strategies addressing equally environmental sustainability and economic resilience in a socially acceptable manner for European agriculture. For more information about the project, please visit the website: <https://brightspace-project.eu>

Position 1: Developing and analyzing high-resolution farmland biodiversity indicators

Your task

- Apply and extend methods to calculate meaningful farmland habitat diversity indicators at the regional and local level for Germany using time series of high-resolution land use data at the field level and economic information from regional economic data (CAPRI database) and farm statistics (e.g., FADN database), which are available to the project.
- Develop and link pressure indicators on biodiversity to datasets indicating the status of (potential) biodiversity in agricultural landscapes, e.g., agricultural land with high natural value (HNV), common farmland bird index, and other datasets.
- Assessing potential biodiversity responses under different (artificially designed) habitat conditions (quality and quantity) and landscape structure (composition and configuration).
- Coordinate the biodiversity indicator development with the Brightspace project team and assess its applicability to the project's agricultural and environmental models.

Your profile

- University degree (M.Sc./University Diploma) in the fields of environmental science (biodiversity conservation, physical geography, agroecology, landscape ecology) or agricultural science (agricultural economics, agricultural geography, farm management)
- excellent knowledge of Geographical Information Systems (GIS) and statistical analysis (frequentist, Bayesian, machine learning)
- Experience in programming routines, preferably with R or Python
- Experience in the analysis of large, heterogeneous data sets
- strong interest in agricultural/environmental science issues
- Excitement to work in an international team
- completed Ph.D. or comparable experience in one of the above areas is an advantage

Position 2: Estimating crop production response using novel field-level data

Your task

- A systematic literature review of agricultural supply research, with a particular focus on novel concepts and estimation approaches using field-level data and identification of new research directions.
- Development and application of economic theory-based approaches for estimating crop production (area) responses based on novel field-level data for major crops in Germany.



- Developing approaches for calculating short- and long-run supply elasticities and developing strategies for grouping areas with homogeneous responses.
- Data on regional prices and other spatial crop supply covariates, such as soil texture, slope from the soil survey geographic database, and precipitation, are identified and collected.

Your profile

- completed university degree (Univ.-Dipl./M. Sc.) in agricultural sciences with a focus on economics (e.g., specializing in agricultural economics, economic and social sciences of agriculture) or agronomy
- excellent knowledge of micro- and macro-economics, agricultural and environmental interrelationships in the field of agriculture
- excellent knowledge of the application of statistical methods and econometric approaches
- Experience with quantitative analysis in STATA and, or R is required
- Experience in estimating production (supply) functions and/or spatial/land market models is an advantage
- Experience in the analysis of agricultural statistical mass data is an advantage
- good knowledge of Geographic Information Systems (GIS) is an advantage
- completed Ph.D. or comparable experience in one of the above areas is required

Personal profile (for all positions)

- Enjoyment of scientific work in interdisciplinary project contexts
- Ability to work independently and in a team
- analytical thinking, critical judgment
- Ability to present complex issues in an understandable and target group-oriented manner
- excellent written and spoken knowledge of English and, if possible, also German
- Willingness to travel on business

We offer you the opportunity to work on socially highly relevant issues at the interface between science, politics, and practice in a varied and stimulating research environment, using contacts with national and international research institutions and organizations. Because our staff's professional and personal development is important to us, we offer extensive professional training and continuing education opportunities. The Institute is on a large park-like research site with leisure facilities (tennis, beach volleyball) and a kindergarten (parent initiative).

We support the compatibility of work and family and are holders of the audit berufundfamilie certificate. To this end, the Thünen Institute offers, among other things, flexible working time models, a home office, and teleworking within the scope of the official possibilities. Part-time employment is possible in principle.

The respective employment relationship is based on the provisions of the collective agreement for the public service (TVöD). Remuneration is paid by pay group 13 of the TVöD.

The Thünen Institute promotes professional equality between women and men and, therefore, expressly welcomes applications from women.

The Thünen Institute is committed to inclusion. Applications from people with severe disabilities are, therefore, expressly welcome. They will be given special consideration in the selection process.

Dr. Alexander Gocht (e-mail alexander.gocht@thuenen.de) will answer any questions about the advertised positions. You can apply for both positions or only for one position. Please indicate the respective reference numbers. If you are applying for several positions, please indicate your preference for one of the two subprojects or one of the two positions.

Job vacancy at the Johann Heinrich von Thünen-Institute



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If you are interested, please send us your application documents, including a letter of motivation, a curriculum vitae in tabular form (describing your education and professional career), and copies of certificates (Master's certificate, school-leaving certificate, etc.) by **31.08.2024**, quoting the reference number(s) **2024-083-06-BW**, preferably electronically (as one pdf document) to

bw@thuenen.de
Dir. und Prof. Dr. Hiltrud Nieberg
Thünen-Institut für Betriebswirtschaft

Informationen nach Artikel 13 DSGVO zur Erhebung personenbezogener Daten finden Sie unter www.thuenen.de/de/thuenen-institut/karriere