PhD-candidate (m/f/d) 75%, TV-L EG13 and Postdoctoral Researcher (m/f/d) 100%, TV-L EG13

Start Date: September 15, 2025 (or later)

UNIVERSITÄT HOHENHEIM

The Department of Ecological-Economic Policy Modelling at the University of Hohenheim is looking for **up to two quantitative researchers** (one PhD and/or one postdoc) to advance our integrated modelling of biodiversity-friendly agri-food transitions in Germany and beyond. You will join a collaborative team linking computable general equilibrium (CGE), land-use (PALUD) and ecosystem-service (InVEST) models to analyse policies, consumer behaviour and sustainability outcomes.

Your tasks

You will contribute to the development and application of an integrated ecological-economic modelling system to analyse biodiversity-friendly agricultural transitions. The work will focus on one or more of the following areas:

1. **Ecosystem services and semi-natural habitats**: further develop the InVEST model to simulate the effects of landscape features such as hedgerows, flower strips, and tree rows on pollination and crop yields; link these outputs with land-use and economic models to assess synergies and trade-offs between biodiversity and productivity.

2. **Land-use modelling and spatial scaling**: extend the PALUD land-use optimisation model to the national scale using high-resolution data; validate its performance through comparison with historical land-use trends; and integrate it with CGE and ecosystem-service models to simulate the impacts of agri-environmental policies.

3. **Consumer preferences and demand modelling**: analyse large-scale household data to estimate preferences for organic and biodiversity-friendly food products; incorporate these insights into a CGE model to evaluate how consumer behaviour interacts with agricultural policy and land-use change.

You will participate in collaborative project meetings and contribute to scientific publications. There are also opportunities to support the mentoring of junior researchers and to engage in proposal writing.

Your qualifications

- **PhD position** – master's degree in agricultural economics, environmental sciences or related fields; enthusiasm for modelling, sustainability policy and biodiversity; programming experience (R, Python, GAMS or GIS) is an asset; very good command of English.
- **Postdoc position** – completed PhD in agricultural/environmental economics or similar; proven expertise in quantitative simulation (CGE, land-use, agent-based or farm models); strong programming skills, including proficiency in GAMS and/or R; very good English.

What we offer

- Competitive public-sector gross salaries: ~€43 000 p.a. (75 % TV-L EG13) for PhD / ~€63 000 p.a. (100 % TV-L EG13) for postdoc, plus social benefits
- Fixed-term contracts: 3 years (PhD) or 4 years (postdoc) with extension options
- Structured doctoral programme (for PhDs), high-performance computing, international networks
- Flexible, hybrid working options
- An inclusive, interdisciplinary environment committed to policy-relevant sustainability research
- Beautiful campus setting with botanical gardens outside your office!

Application

Send **one PDF** (CV, transcripts, contact details of two referees and a 1–2-page motivation letter) to **jonathan.gerlach@uni-hohenheim.de by 30 July 2025**. Interviews will be held online in August 2025.

The motivation letter should clearly state (a) whether you are applying for a postdoctoral or PhD position, (b) your skills and experience in ecological-economic policy modelling, and (c) which topic(s) outlined above are most relevant to your research interests.

For queries, contact **Prof. Dr. Arndt Feuerbacher** (a.feuerbacher@uni-hohenheim.de).