



The Ecosystem Modelling group at the Georg-August-Universität Göttingen is offering a

PhD position in the DFG Research Unit FOR2432

B01 / Agricultural biodiversity and associated services across rural-urban landscapes – modelling studies

The position will be limited for three years, starting **01.09.2019**. Salary: The salary is in accordance with the German state regulated public service salary scale (TVL E13) with 65%, which corresponds to 25.87 working hours per week.

FOR2432 has a wide disciplinary scope, covering diverse dimensions of Socio-Ecological Systems along the rural-urban interface. Its research programme addresses transition processes in agriculture, ecology, economy, and society that are linked to rapid urbanization, using Bangalore, an emerging megacity in South India, as an example. Research will be carried out in close cooperation with Indian partner institutions.

Your duties

The project aims at understanding the ecology and economics of crop pollination at the rural-urban interface. The goal is to identify urban planning strategies that maximize pollinator conservation and economic returns of pollination. This will be achieved by refining and analyzing spatially explicit simulation models of multi-species bee dynamics in a dynamic city landscape. The models are coded in R and will be parameterized based on existing ecological and economic data. For parameterization of the urban growth model, aerial images of Bangalore will be analyzed using machine learning techniques. Your tasks will be the following:

- Refinement and analysis of simulation models of city growth and of the ecology and economics of pollination in rural-urban landscapes
- Classification of current and historical aerial images of Bangalore from the perspective of bees
- Presentation and publication of research results.

Your profile

- You hold a Master degree in ecology, forestry, environmental sciences, or a related field
- have excellent knowledge of ecological modelling, programming, and statistics
- are experienced in programming and analysis of simulation models
- are willing to learn machine learning techniques
- are willing to do field work in Bangalore
- are willing to collaborate with scientists of other disciplines within the Research Unit.
- are proficient in English.

The project is based in Göttingen, field work in India for at least one month per year is required. Fitness for service in the tropics is therefore mandatory.

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply in fields in which they are underrepresented. The university has committed itself to being a family-friendly institution and supports their employees in balancing work and family life. The mission of the University is to employ a greater number of severely disabled persons. Applications from severely disabled persons with equivalent qualifications will be given preference.

Please upload your application containing the usual documents (cover letter, full CV with the contact information of two referees, copies of university certificates and transcripts, and a 1-page summary of your Master thesis) in electronic form as a single pdf-file under the following link

https://lotus2.gwdg.de/uni/uzdv/perso/knr_100535.nsf

Review of applications will commence on **June 2, 2019**, and continue until the position is filled.

For any questions, please contact Prof. Dr. Kerstin Wiegand, e-mail: kwiegand1*uni-goettingen.de

Please note:

With submission of your application, you accept the processing of your applicant data in terms of data-protection law. Further information on the legal basis and data usage is provided in the Hinweisblatt zur Datenschutzgrundverordnung (DSGVO) <https://www.uni-goettingen.de/hinweisdsuvo>