

IDENTIFYING SOCIAL-ECOLOGICAL SYSTEM PROPERTIES BENEFITING BIODIVERSITY AND FOOD SECURITY

Up to 4 PhD Positions and 3 Postdoc positions

Expressions of interest are being sought for up to four new PhD positions and three postdoc positions, starting between late 2014 (postdocs) and mid-2015 (PhD positions). Please register your interest and send your CV to Joern Fischer (<u>Joern.Fischer@uni.leuphana.de</u>, also see <u>ideas4sustainability.wordpress.com</u>). You will then be sent the official advertisement when it comes out.

The project

Ensuring food security and halting biodiversity decline are two of the most urgent (and interconnected) challenges facing humanity in the 21st century. Taking a social-ecological systems perspective, this project seeks to identify synergies between food security and biodiversity conservation. A multi-scale approach will be used to balance the trade-offs between depth and generality. First, we will develop a global database of social-ecological systems, relating their general properties to indicators of food security and biodiversity. Second, we will conduct in-depth workshops on 15-20 social-ecological systems worldwide to reveal in more detail the causal linkages between system properties, food security and biodiversity. Third, we will conduct an in-depth empirical case study on food security and biodiversity in Ethiopia.

Postdoc 1: Quantitative analysis and global databasing of social-ecological systems

This position requires an individual with highly developed quantitative and conceptual skills, who is able to apply these in an interdisciplinary context.

Postdoc 2: Conceptual mapping of social-ecological systems worldwide

This position requires an individual with highly developed workshop facilitation and systems mapping skills (e.g. causal loop diagrams), who is willing to travel frequently to conduct workshops in many settings worldwide.

Postdoc 3: Postdoc associated specifically with the Ethiopia case study

This position requires an individual who is able to conduct independent research and assist in PhD student supervision, with particular emphasis on the (interdisciplinary) case study in Ethiopia.

PhD 1 and PhD 2: Social aspects of food security and biodiversity conservation

These two positions are suitable for social scientists in the broadest sense. They will focus on social aspects in the case study region in Ethiopia. Tasks will include actor and network analysis, governance analysis, analysis of livelihood assets, and analysis of food flows and food security in different households and communities within the study area.

PhD 3 and PhD 4: Ecological aspects of food security and biodiversity conservation

These two positions are suitable for ecologists in the broadest sense, and also focus on the case study region in Ethiopia. Tasks will include mapping land cover and agricultural yields, biodiversity surveys and statistical distribution modelling, and assessment of ecosystem services. Potential target taxa include mammals, birds, butterflies, or plants.

For all positions, both Ethiopian and non-Ethiopian candidates are encouraged to register their interest (please indicate which languages you speak in your CV).

The specific description and combination of positions may change. A formal advertisement will follow.

This project is funded by the European Research Council. It includes collaboration with Stockholm University (Dr. Kristoffer Hylander) and Addis Ababa University (Dr. Feyera Senbeta), as well as links with many other research groups worldwide, including the Programme on Ecosystem Change and Society (http://pecs-science.org/). Although different projects components are partly independent, there will be large amounts of collaboration within the research team.