

# Doctoral position (m/f/d) tropical grasslands restoration

20.04.2023

The Livestock Systems research group at the TUM School of Life Sciences is recruiting a PhD student (m/f/d) to work on grassland restoration. In our group, we quantify trade-offs between production, mitigation and conservation in livestock systems, and to identify innovative mechanisms for landscape-level management. This doctoral position will generate empirical evidence to understand the functioning of grazing systems in Kenya where livestock graze with large mammals. This research project will examine the potential to use grazing duration and intensity and manipulation of plant species to assess the potential for grassland restoration. The experiments will assess the effects of grazing on productivity and stability of grasslands, aiming to detect early restoration success. This work is conducted in close collaboration with the International Livestock Research Institute (ILRI), and their network of partners.

## Your tasks:

will be to design and conduct experiments at various scales from laboratory manipulations of soil-plant systems including micro and mesocosms under varying environmental conditions, to large field-scale experiments with wild and domestic grazers. These experiments will test hypotheses related to the effects on nutrient cycling of grazers with different body size and grazing habits and duration of grazing under contrasting soil and environmental conditions. You will collaborate with modellers to integrate empirical and novel evidence to improve the understanding of functioning of tropical and sub-tropical grasslands.

## What we expect from you

- University degree (M.Sc.) in Agricultural Science, Biology, Ecology, Environmental Science or a related field.
- Thorough understanding of the processes determining grasslands productivity, nutrient cycling and those leading to grassland degradation.
- Experience in conducting experiments (field and laboratory). Experience conducting work overseas is desirable.
- Experience conducting statistical analyses of experimental datasets, and analytical skills (proficiency in R, Python, or Matlab).
- Interest in interdisciplinary approaches.
- Good language (written and spoken English) and presentation skills.
- Ability to work in a team, with effective interpersonal communication skills.
- Willingness to assist with the supervision of BSc, MSc research.

## Our offer

We offer an interesting and challenging job in a motivating and expanding international team at Chair of Livestock Systems in TUM (Freising). The chair has a broad network of collaborators across Europe

(e.g. Lancaster University, The University of Manchester, Wageningen University, University Giessen, Göttingen University, GFZ Potsdam, University of Galway), Africa and the Americas. The Chair of Livestock Systems is newly established at TUM and will include several postdocs, PhD students, and technical staff. The team will work on various topics, including multi-scale analyses of productivity, nutrient and water cycling in livestock systems, grassland restoration, GHG emissions from livestock systems, and global changes impacts on crop-livestock systems. Freising is a charming small student city in the vicinity to the vibrant city of Munich, very well connected by train (ca. 30 minutes), and a perfect starting point to explore the Bavarian Alps and the rest of Germany.

Working hours are flexible and remuneration is in accordance with TUM regulations (65% TV-L E13). Severely disabled persons will be given preference in the case of essentially equal suitability and qualifications. The position is for three years to complete the PhD studies. TUM aims to increase the proportion of female candidates; applications from female candidates are therefore particularly encouraged.

## Contact

Please send your application with a short letter of motivation conveying your interest and suitability for the position, CV, and certificates and the contact details of two references to Technical University of Munich, Chair of Livestock Systems, Liesel-Beckmann Straße 4, 85354 Freising, Tel: +49 (0)816171 5483, Email: [office.lsys@tum.de](mailto:office.lsys@tum.de) by **19.05.2023**. If you are applying by email, please send all documents as a single PDF document.

When applying for a position at the Technical University of Munich (TUM), you will be submitting personal data. Please refer to our data protection information in accordance with Art. 13 of the General Data Protection Regulation (DSGVO) <http://go.tum.de/554159> regarding the collection and processing of personal data in the context of your application. By submitting your application, you confirm that you have taken note of the TUM data protection information.

Please direct questions about the position to Prof. Mariana Rufino ([mariana.rufino@tum.de](mailto:mariana.rufino@tum.de)).

More information about the Livestock Systems Research Group can be found at [www3.ls.tum.de/lsys/](http://www3.ls.tum.de/lsys/)