



## UNIVERSITY OF NAIROBI

### PhD Position Announcement – Danida ENHANCE

Opens 5<sup>th</sup> February 2025, closes 28<sup>th</sup> February 2025

**Project Title:** *Climate influence on zoonoses at human-livestock-wildlife interfaces in the transboundary region between Kenya and Tanzania (ENHANCE)*

#### **Project description and objectives:**

Climate and land-use changes significantly influence zoonosis emergence and spread. However, there are still knowledge gaps, and further research is needed to plan how to mitigate these two threats to national and global health security. The aim of the project is to better understand the dynamics between climate indicators and enhanced survival and transmission of emerging and neglected zoonotic pathogens at unique shared human-livestock-wildlife interfaces (water pans and bomas), and how this affects human and animal health and livelihoods. This will provide invaluable data that will enable Kenya and Tanzania to improve their ability to prevent, prepare, and respond to emerging and re-emerging zoonotic threats. In addition, the project will inform on the links between intensified activity around water pans and bomas, and dissolved organic carbon and greenhouse gas emissions, data which can be used in mitigation strategies against global warming. Finally, with a focus on social conflicts, data will be provided which can help the two countries to better resolve conflicts associated with water scarcity.

The project is funded by DANIDA, Denmark, and is led by the University of Copenhagen.

#### **The call:**

Professor Dr. Daniel Olago, Department of Earth and Climate Sciences & Institute for Climate Change and Adaptation, University of Nairobi, seeks a PhD Applicant to conduct research on water availability, water quality, and greenhouse gas emissions from water pans (dams) in Kenya and Tanzania as part of a DANIDA-funded project, ENHANCE (Climate influence on zoonoses at human-livestock-wildlife interfaces in the transboundary region between Kenya and Tanzania). The PhD candidate will be part of a multi-disciplinary and international team with partners from Denmark, Kenya, and Tanzania, focusing on water and health in the cross-border region.

The project will entail extensive field work in Narok county and periodic wide-spread surveys in Tanzania and Kenya. The candidate is expected to organize field campaigns, take responsibility for laboratory analyses, and interact with stakeholders and community members as needed. The candidate will also be expected to participate in project meetings, collaborate with other students and researchers on the project, and commit to the research full time in order to complete the PhD within the allocated funding period (4 years, starting from March 2025). The research will lead to publications in international, peer-reviewed journals.

The ideal candidate will have the following prerequisites:

1. An MSc degree or equivalent in natural sciences;
2. A background in aquatic science and/or biogeochemistry

3. Knowledge of climate change and carbon and nitrogen dynamics and fluxes in ecosystems;
4. Prior experience in field and laboratory work and statistical analysis;
5. Skills in GIS and/or remote sensing.

In addition, we look for a candidate who has an eagerness to learn new techniques and develop skills in critical thinking, inquiry, and scientific writing. Trustworthiness and attention to detail in handling data and other reporting responsibilities including expense claims, is required.

**Mandatory Requirements:**

- Must be a Kenyan citizen;
- Must be an early career researcher who has completed their masters degree not more than five years earlier than the time of application (not older than February 2020);
- Must be willing to be contracted as a full-time student for the 4 year period.

**Terms of Engagement:**

The PhD will be enrolled at University of Nairobi and co-mentored by members of the project team including Dr. Gretchen Gettel, Dr. Klaus Butterbach-Bahl, Dr. Dishon Muloi, and Dr. Arshnee Moodley.

This is a full-time PhD position with a duration of four years, starting in March 2025 and has a requirement for admission letter to join the PhD in Climate Change and Adaptation of the University of Nairobi (commencing September 2025). The student is required to be resident in Nairobi. A monthly stipend will be paid to the student following successful provisional admission to the PhD programme and engagement in the ENHANCE project. Full admission to the PhD programme will be granted upon the student presenting an approved research proposal - this process should be completed within the first six months of the programme. All research and travel expenses shall be covered by the project.

**Application Information:**

If you are interested in this opportunity, please send your applications containing (1) a motivation statement (500 words maximum), (2) an introductory and signed cover letter (one page), (3) a CV summarizing your academic and professional experience, and publications, if any (4 pages maximum) and (4) contact information for two referees to [arua-cd-icca@uonbi.ac.ke](mailto:arua-cd-icca@uonbi.ac.ke) and copy [chairman-earthclimatesciences@uonbi.ac.ke](mailto:chairman-earthclimatesciences@uonbi.ac.ke). The applications close at midnight on 28<sup>th</sup> February 2025. Interviews and a final selection of the candidate is expected to be made during the month of March 2024.

*Women are strongly encouraged to apply.*