



# UNIVERSITY OF NAIROBI

## EXTERNAL JOB VACANCIES (PROJECT POSITION)

Applications are invited for the following position:

**POST-DOCTORAL FELLOW – GIS, GLOBAL CENTRE ON ADAPTION – UNIVERSITY OF NAIROBI (GCA - UON) PROJECT AD/10/103/22 – 1 POST**

### The Project

The Global Center on Adaptation (GCA) and the University of Nairobi (UoN) have established a partnership to scale up adaptation in Kenya and in the East African region. The project is titled “*Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure in Kenya and The East African Region*”. The collaboration will broker and strengthen new networks of climate change and infrastructure experts, including universities, global climate research institutions, engineering experts, and financing partners, with a focus on scaling up adaptation for resilient infrastructure. Specific interventions in Kenya will include a focus on four priority areas covering national investment pipelines, asset level investment resilience, capacity for mainstreaming climate adaptation, and disruptive technology for climate resilient infrastructure.

The **Global Center on Adaptation (GCA)** works as a solutions broker to accelerate action and support for adaptation, from the international to the local, working together with and building upon the efforts of a large variety of partners.

The **Africa Adaptation Acceleration Program (AAAP)** is an African-own and African-led initiative implemented by GCA and the African Development Bank (AfDB), with the support of the Africa Union (AU) and African leaders. The AAAP aims to mobilize US\$25 billion for climate adaptation investments in Africa by 2025 for a faster and stronger post-COVID-19 economic recovery based on climate-resilient development pathways.

The **University of Nairobi (UoN)** is represented in the project by (1) The Institute for Climate Change and Adaptation in the Department of Earth and Climate Sciences that conducts research and provides policy advice on climate change and adaptation, (2) the C4DLab which is a prototyping and innovative startup incubation lab at the Department of Computing and Informatics and (3) the Faculty of Engineering whose research areas in infrastructure development include water, transportation, energy, materials, and value addition.

## **Post-Doctoral Fellow – GIS**

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| <b>Title</b>                  | Post-Doctoral Fellow – GIS   |
| <b>Organisation</b>           | University of Nairobi  |
| <b>Location</b>               | Nairobi  |
| <b>Stipend</b>                | An attractive package will be offered  |
| <b>Hours</b>                  | Full time  |
| <b>Contract type</b>          | Two years fixed.   |
| <b>Restrictions</b>           | Open to Kenya citizens only  |
| <b>Reporting to</b>           | Prof. Faith Karanja and Prof. Daniel Olago   |
| <b>Starting Date</b>          | 1 <sup>st</sup> January 2023 or as soon as possible thereafter   |
| <b>Additional information</b> | The GCA-UoN project will offer supervision and all operational costs directly related to the research work. The Fellow will be based in the Department of Geospatial and Space Technology, University of Nairobi and will also have affiliation with the Institute for Climate Change and Adaptation, University of Nairobi. |

The Post-Doctoral Fellow will be engaged in the following research activities:

- Detailed literature review & identification of sources of data and information
- Actively participate in the identification of adaptation needs through assessment of infrastructure system resilience to climate hazards and with respect to (1) enabling environment, (2) built environment, (3) natural environment.
- Lead in the establishment of an inventory/spatial Database of spatial data on: Climate hazards (highest resolution probabilistic data); Infrastructure networks and assets - energy, water, roads, rail, ports, airports, and ICT assets; Critical physical assets that rely on infrastructure systems, such as hospitals, clinics, and schools; Natural assets that can play a role in protecting or substituting infrastructure assets and services; and Related economic and social services that rely on these networks (e.g. trade flows and traffic flows)
- Map climate hotspots where infrastructure systems and assets are exposed to climate related hazards and in collaboration with other project team members quantify climate impacts on physical assets and quantify the cost of disruptions on services.
- Support multi-stakeholder climate risk dialogues and contribute to the development of the Master class on PPPs using spatial/ mapped case studies.
- Any other duties.

### **Requirements:**

#### **Essential**

- Hold a PhD degree in Geoinformation or related field
- Competent in using Geographic Information Systems (GIS) tools for spatial modeling
- Knowledge of climate change and adaptation and the policy contexts
- Experience in undertaking high quality research in the application of spatial tools
- Knowledge of sustainable development, climate change mitigation and adaptation, East African environmental and developmental policies
- Desire to learn and explore new intellectual territory
- Motivation and ability to work collaboratively in a large trans disciplinary project including multiple disciplines, cultures, languages and environments
- Willingness to undertake field and stakeholder-based research
- Demonstrated strong communication skills, both oral and written
- Ability to work with minimum supervision and to coordinate and oversee research assistants

## **Desirable**

- Experience of reporting and presenting research findings to a variety of audiences
- Familiarity with multidisciplinary/trans disciplinary approaches to research
- Strong in data analytics, including programming languages such as Structured Query Language (SQL), R or Python-Statistical Programming
- Good data visualization and presentation skills

## **NOTES**

1. Applicants should email their application letters, certified copies of certificates and curriculum vitae (CV) giving details of their qualifications, experience and three (3) referees, as well as indicating their telephone and e-mail contacts.
2. Applications and related documents should be forwarded through applicants' Heads of Departments, where applicable, and be addressed to the Director, Human Resource, University of Nairobi.
3. Applicants should state their current designations, salaries and other benefits attached to those designations.
4. The application letter must bear the reference code indicated in the advertisement.
5. Late applications will not be considered.
6. Applications should be emailed as one file in PDF to: [recruit-pdfgis@uonbi.ac.ke](mailto:recruit-pdfgis@uonbi.ac.ke)

**CLOSING DATE: WEDNESDAY, OCTOBER 26, 2022**

**THE UNIVERSITY OF NAIROBI IS AN EQUAL OPPORTUNITY EMPLOYER. FEMALE APPLICANTS ARE STRONGLY ENCOURAGED.**

**ONLY SHORTLISTED APPLICANTS WILL BE CONTACTED.**