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# HARISSA

## Call for PhD candidate

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### The use and communication of natural hazards information from citizen science

#### Project background

The PhD position frames in the context of the scientific cooperation project HARISSA entitled “*NATURAL HAZARDS, RISKS AND SOCIETY IN AFRICA: DEVELOPING KNOWLEDGE AND CAPACITIES*” funded by the Belgian Development Cooperation (DGD). HARISSA is coordinated by the **Royal Museum for Central Africa** (RMCA, Belgium) in partnership with **Mbarara University of Science and Technology** (MUST, Uganda). HARISSA's long-term overall objective is to contribute to reducing the incidence of natural hazards and associated risks in Central Africa and in particular in the West Branch of the East African Rift (DRC, Uganda, Rwanda and Burundi). The project aims to develop knowledge and expertise of the partner institutions by following four specific objectives: 1/ academic training, 2/ mapping and hazard data collection, 3/ improving awareness and risk preparedness, and 4/ consolidating previous achievements. The achievement of these objectives is based on the strengthening of key institutions in these domains with a strong link to citizen-based science. The project aims to target the wide range of stakeholders concerned by natural hazard risks and disasters, from academic or research groups to citizens and policy makers.

#### PhD topic

The South-West region of Uganda is exposed to natural hazards such as landslides and floods. Over the past 5 years, inventories of these hazards have been compiled, through, among others the setting up of a network of citizen observers that collected information in their communities. With such information from citizens, the basic understanding of the occurrence and interactions of these hazards with respect to natural and human-induced factors could be better constrained. Yet, effort of collecting information from citizens is still needed to deliver research datasets and products whose potential use can be of an added value for stakeholders. In addition, communication efforts should be reinforced to make sure that research outcomes are properly communicated to and understood by stakeholders, potentially contributing to the effort of disaster risk reduction.

#### *General objective:*

- ⇒ This research will focus on the use and communication of natural hazards information from citizen science in the South West region of Uganda

#### *Specific objectives:*

- ⇒ A database of natural hazard information based on the network of citizens is compiled and shared, together with explanation of their potentiality and limitations;
- ⇒ Detailed indicator-based landside hazard maps of the region developed from the information collected by the citizen network and stakeholders are built;
- ⇒ The communication around the understanding and the use of these hazard maps by stakeholders is developed.

#### *Method and data:*

data collected from a citizen-observer network similar to the network built during the first phase of HARISSA (Kanyiginya et al., 2023. African Geographical Review <https://www.tandfonline.com/doi/abs/10.1080/19376812.2023.2280589>). The PhD candidate will play an active role at managing this network)

- survey-based field research and participatory approaches
- GIS-based spatial analysis

## Applicant's profile

- You must hold a **MSc degree in Geography/ Environmental Sciences**, or a related science discipline;
- You must have obtained **upper second class** from your Bachelor's and Master's degree;
- You must have experience in survey-based field research and/or participatory approaches;
- Experience in the use of geomatics (GIS) and quantitative analytical techniques is a plus;
- You must be highly **motivated** to undertake academic research in an international context;
- You must be **hard-working** and able to manage a project independently, taking initiative and meeting deadlines;
- You must develop a detailed **concept note** (pre-proposal) and demonstrate that you have the ability to finish it and produce a fully researchable and competitive proposal;
- You must be ready to bring creativity, uncovering hidden issues that will benefit the project, science and local livelihoods in general;
- You must be sincere, and willing to respect agreements; you must understand the relevance of project confidentiality and proper data handling and processing;
- You must be willing to contribute to certain aspects related to the day-to-day running of the project;
- You must demonstrate **academic leadership** and are –if needed– keen to supervise MSc students;
- You must demonstrate good interpersonal and organizational skills, with attention to detail, to interact with other project partners and stakeholders;
- You should be affiliated to a university or research institute or should be already a staff member of MUST (preferably), but Ugandan candidates outside these institutions can also apply.
- If already a staff at MUST, you must be willing to develop your research and continue to contribute to the teaching and research mission of MUST beyond the project lifetime.
- Female candidates that satisfy the above conditions are encouraged to apply.

## What the Project offers

- The PhD will be carried out in **4 years following a sandwich mode**; the researcher will spend part of the year in Belgium (at RMCA mostly) and the rest of the year in Uganda with an affiliation at MUST;
- The thesis **begins on October 1, 2024 and ends on September 30, 2028**.
- The number of months in Belgium is split as follows: 2024: 0/2025: 5/2026: 5/2027: 4/2028: 5. Total: 19 months in Belgium;
- The PhD candidate will join RMCA staff and will also be affiliated to the Vrije Universiteit Brussel (VUB), Belgium – **the PhD degree will be awarded by VUB**;
- The scholarship covers travel and living expenses in Belgium, registration at the VUB, participation in conferences, field expenses and a modest stipend in Uganda, IT equipment

costs, and other miscellaneous expenses up to a certain budget. The scholarship funding is compliant with the official scholarship schemes of DGD;

- The doctoral candidate is placed on availability at MUST and devotes himself/herself full-time to his/her thesis when in Uganda. Freed from his/her professional obligations for the duration of the thesis, he/she can participate in the scientific activities of the institution (seminars, conferences, ...);
- The candidate will be subject to the regulations of the host university in Belgium which involves monitoring the progress of the work by a PhD committee (including its promoters). The full PhD funding is conditional to the successful defense of a PhD proposal and obtaining sufficient course credits during the first 5-months stay in Belgium;
- The PhD candidate will interact with other PhD students both from Uganda and Belgium; he/she will interact with the other researchers selected within the framework of HARISSA (from DRC and Burundi) and also with the various partners of the HARISSA project in the North and South, and other projects led by the RMCA and its collaborators;
- The candidate will be supervised by a senior scientist based at RMCA (Belgium) in collaboration with a promoter from VUB and a promoter from MUST.

## Application procedure

The application should include:

- A concept note (no more than 1000 words), is mandatory. The Concept note must include a title for the proposed study, brief background highlighting key literature, research problem, main research question, methodology and list of key references
- A CV (2 pages max) + list of publications (if applicable)
- Copies of academic degrees documents and transcript of records
- A statement of motivation (1 page)
- A letter of recommendation from the current employer/immediate supervisor (1 page)
- A letter from an academic referee supporting your application (1 page)
- A digital copy of your master thesis (and, if applicable, publications)
- The applications should be addressed (and submitted) to Dr. Olivier Dewitte ([olivier.dewitte@africamuseum.be](mailto:olivier.dewitte@africamuseum.be)), Dr. François Kervyn ([francois.kervyn@africamuseum.be](mailto:francois.kervyn@africamuseum.be)) and Dr. Ronald Twongyirwe ([rtwongyirwe@must.ac.ug](mailto:rtwongyirwe@must.ac.ug))
- The application should be compiled in one standalone PDF file
- All applications should be submitted by 06<sup>th</sup> of June, 2024, 5:00 pm East African time.

## Interviews

- The selection process will involve two stages – a pre-selection phase between 07<sup>th</sup> and 12<sup>th</sup> June 2024. Pre-selected candidates will be contacted for an interview on the 17<sup>th</sup> of June 2024. The successful candidate should be ready to start on his/her PhD studies 1<sup>st</sup> October 2024.