

# MSc. Soil Science Position

We are looking for a M.Sc. student in Agricultural Sciences to join our team in the area of soil moisture sensor-controlled irrigation, for improving water and nutrient management among small-scale farmers in the Lake Victoria Basin (LVB). With one-year funding from the Ministry of Science, Technology and Innovation (MoSTI) through the National Research and Innovation Program (NRIP), we aim to customize a semi-automated irrigation system to improve adaptive practices on managing seasonal water stress in small-scale vegetable farming. We envision the development of a soil water management tool to support farmers' decisions on supplementary irrigation and soil water conservation in vegetable growing.

The M.Sc. position at Makerere University will focus on the use of soil matric sensors (TEROS<sup>®</sup>, Meter Group Inc.) to improve crop production and yield, and enhance farmers' decisions on improving water use efficiency. The work will be carried out at two sites namely Makerere University Agricultural Research Institute, Kabanyolo (MUARIK) in Wakiso district and Kibooba village in Nakaseke District.

## Key responsibilities:

- Develop a research proposal, set up and monitor experiments and support collection of required data for fulfilling the award of a M.Sc. Soil Science degree of Makerere University.
- Work in the laboratory on the project related duties.
- Support the research team in writing and publishing in peer-reviewed journals that highlight the findings from the research project.
- Coordinate and contribute to the maintenance of field experiments including equipment and tools through working with host farmers and extension workers at the above sites.
- Assist in the coordination of any other project activities as assigned by the project PI.

We implore the M.Sc. student to pursue your own research interests, which should have a thematic overlap with the major responsibilities.

## Requirements:

- You hold a B.Sc. in the field of Agriculture, preferably a specialization in Soil Science or Land Use Management. Knowledge in agronomy and work experience in irrigation and water management is an added advantage.
- You have strong interests in Soil Physics
- You have completed your year one course work and ready to do your research.
- Possession of strong skills in managing and analyses of continuous data and use of statistical packages for biological sciences.
- Experience in working with rural farmers and research groups is valuable.
- You have strong communication skills and good writing skills.
- You are result-oriented and have the ability to work with minimum supervision.

**DEADLINE: Please apply by 20 December 2021 directly to [emmanuel.opolot@mak.ac.ug](mailto:emmanuel.opolot@mak.ac.ug)**

Application documents should comprise a motivation letter including research interests, CV, relevant education certificates, and a short sample of your work (e.g. journal publication (if any)), all in one pdf file approx. 2-10 pages). For further information or to discuss the position please contact the project PI Dr. Emmanuel Opolot: [emmanuel.opolot@mak.ac.ug](mailto:emmanuel.opolot@mak.ac.ug); [oplote@yahoo.com](mailto:oplote@yahoo.com); +256779624011