

## Ministry of Education and Sports -African Development Bank- CIAT

### Call for Applications for Higher Education, Science and Technology (HEST) Research and Project Scholarships 2014 for MSc and PhD Programs

The Government of Uganda through a Loan from the African Development Fund to support the Education V Project (Support to Higher Education, Science and Technology- HEST) has contracted the International Centre for Tropical Agriculture (CIAT) Uganda to facilitate post graduate training in Agriculture in collaboration with the Faculties of Agriculture at Ugandan Universities by enabling the institutions to carry out research on tropical agriculture beyond the normal learning process, to multiplication of research outputs in industry. The scholarships are attainable at Makerere University, Kampala, Uganda. Applications are hence invited from qualified candidates for PhD and MSc. graduate training in the fields of Plant breeding and Plant biotechnology, Plant Breeding and Seed Systems, Plant Pathology, Food Science and Technology, Agricultural Economics and Soil/Environmental Sciences.

#### Duties and responsibilities:

Students' projects have been designed to fit into the Pan Africa Bean Research Alliance (PABRA: [www.pabra-africa.org](http://www.pabra-africa.org)) framework and contribute greatly to the scientific research conducted by CIAT. Under the supervision of a carefully selected supervisory team consisting of CIAT Scientists, designated university supervisors, and the National Research Programs, the successful candidates will join a team of researchers in Uganda on different themes.

The scholarship topics are listed below:

Level	Theme	Topic and Hypothesis	Minimum academic requirements
PhD	Food Science and Technology	Comparison of iron bioavailability from a fortified bio fortified bean product versus a fortified standard bean product: The main research hypothesis is that the bio fortified beans contain more bioavailable iron than the standard beans.	Master's degree in a field relevant to Food Science and Technology. A research synopsis of 3 – 5 pages should accompany the application.
PhD	Plant Pathology	Unveiling the molecular mechanism of interaction between common beans and <i>Pseudomonas savastano</i> pv. <i>phaseolicola</i> . The main research hypothesis is that the interaction between <i>P. vulgaris</i> and <i>P. savastano</i> pv. <i>phaseolicola</i> involves modulation of several molecular process.	Master's degree in Plant/Crop Sciences. A research synopsis of 3 – 5 pages should accompany the application.
PhD	Plant Breeding and Biotechnology	Assessment of the mode of inheritance of a six gene disease pyramid and effectiveness of gene pyramiding in controlling multiple diseases. The main hypothesis is that gene pyramided lines offer greater resistance to multiple diseases.	Master's degree in Plant/Crop Sciences. A research synopsis of 3 – 5 pages should accompany the application.
MSc	Plant Breeding and Seed systems	Introgression of BSM tolerance in root rot resistant and drought tolerant lines.	BSc, Agric., Forestry, Horticulture, Honors degree or its equivalent from a recognized University or institution.
MSc	Soil Science/Agronomy	Evaluating the potential to enhance productivity of integrated systems and their components within a variable and heterogeneous production environment.	BSc Agric., Forestry, Horticulture Honors degree or its equivalent from a recognized University or institution.
MSc	Soil Science/Agronomy	Integrating crop-livestock production systems for increased crop production.	BSc Agric., Forestry, Horticulture, Honors degree or its equivalent from a recognized University or institution.
MSc	Agricultural Economics	Economic evaluation of the potential demand of bean based products: An application of choice based conjoint analysis.	A honors first degree in Agriculture, Economics, Statistics & Economics, Forestry or its equivalent from a recognized University or institution.
MSc	Agricultural Economics	The role of market access, human capital and risk in the adaptation to climate change.	A honors first degree in Agriculture, Economics, Statistics & Economics, Forestry or its equivalent from a recognized University or institution.

#### Expected Outputs

Research Thesis

Publications

#### Minimum requirements:

##### PhD Scholarships

- Proof of admission from Makerere University.
- A MSc university in one of the fields highlighted above.
- Good report writing skills and good interpersonal/people skills.
- Previous research experience will be added advantage.
- Age limit not exceeding 45 years.
- Previous experience and knowledge in field of study (added advantage).

##### MSC Scholarships

- Proof of admission from Makerere University.
- A university degree in one of the fields highlighted above.
- Proven skills in computing systems and applications.
- Good report writing skills and good interpersonal/people skills.
- Previous research experience will be added advantage.
- Age limit not exceeding 35 years.
- Previous experience and knowledge in field of study (added advantage).

**Terms and conditions position:** Financial support will be available to cover research expenses, tuition and a modest stipend. The MSc Scholarship is for a period of two years and PhD for three years starting September, 2014.

**Applications:** Electronic submissions of application letters and CV with at least 3 references should be sent to the following: Dr. Clare Mukankusi Mugisha ([c.mukankusi@cgiar.org](mailto:c.mukankusi@cgiar.org)) and copied to Ms. Sarah Nassosi ([s.nassozi@cgiar.org](mailto:s.nassozi@cgiar.org))

Applicants must indicate their contact telephone number/s and e-mail address for easy contact.

Females and Persons with disabilities are particularly encouraged to apply and will be accorded an advantage of 2 points in the evaluation.

**Application deadline:** 12th October 2014. Only shortlisted candidates will be contacted for interviews.

*Those who responded to the earlier advertisement need not apply again and only shortlisted candidates will be contacted for interviews.*