POSTDOCTORAL FELLOW – ENVIRONMENTAL MODELING

The Organization

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) delivers research-based solutions that harness agricultural biodiversity and sustainably transform food systems to improve people’s lives. Alliance solutions address the global crises of malnutrition, climate change, biodiversity loss, and environmental degradation. With novel partnerships, the Alliance generates evidence and mainstreams innovations to transform food systems and landscapes so that they sustain the planet, drive prosperity, and nourish people in a climate crisis. The Alliance is part of CGIAR, a global research partnership for a food-secure future.

The Alliance is a new venture created to turn food and agriculture systems around to be more sustainable healthy, and inclusive. Combining the experience and strengths of the two organizations – including gene-banks, use and conservation of agrobiodiversity, climate-smart and digital agriculture, nutrition, and participatory research – will help the Alliance lead the way on six key Levers of change: (1) food environment and consumer behavior, (2) multifunctional landscapes, (3) climate action, (4) biodiversity for food and agriculture, (5) digital inclusion, and (6) crops for nutrition and health. These are all the pressure points where the Alliance can play a catalytic role with interventions that can trigger multiplier effects for positive change.

About the position

The Alliance is seeking to recruit an Environmental Modeler – Postdoctoral who will be responsible for modeling environmental impacts and adaptation opportunities of livestock production systems across Africa, Latin-America and South-East Asia. S/he will be working within various projects of the Tropical Forages Program which is part of the Crops for Nutrition and Health Lever. The desired candidate is an innovative, dynamic professional able to work independently with minimal supervision, but also participate as a team member in accomplishment of duties. S/he needs strong technical skills in programming and quantitative modeling approaches and tools.

Responsibilities

- Maintenance and further development of the CLEANED model
- Developing and programming modeling tools to estimate environmental impacts (GHG, biodiversity, water, soils, land) of livestock systems at field, farm, landscape, value chain and regional levels including ways of linking models
- Developing, programming and applying modeling tools to predict future climate change impacts on livestock and forages, and adaptation opportunities
- Developing new and innovative approaches and methods based on state-of-the-art published literature
- Apply models to case studies in collaboration with various research partners and stakeholders
- Develop charts, graphs, tables, dashboards and other visualizations for use in scientific and stakeholder presentations and publications
- Capacity building of partners in modeling tools and approaches
- Design, maintenance and implementation of databases storing farming system and environmental data
- Write-up and publication of research results

**Required competencies and skills**

- PhD degree in programs related to agriculture, environment, programming and data science and/or related fields, or MSc degree with a minimum of 5 years work experience
- Strong technical skills in quantitative environmental modeling, programming and data analysis, preferably including R programming
- GIS mapping and spatial analysis skills are added advantage
- Good understanding of environmental impacts of agriculture and livestock systems, and adaptation to climate change
- Excellent English communication skills, both written and oral, for diverse audiences including scientists and decision/policymakers
- Proven experience in writing various publications including peer-reviewed journal papers
- Organizational skills in order to assure quality data and modeling and traceable workflow and timely delivery
- Ability to work with various researchers across teams, regions and projects
- Knowledge of French and/or Spanish is an added advantage

**Terms of employment**

This is an internationally recruited position based in Nairobi (Kenya). The initial contract will be for two (2) years, subject to a probation period of three (3) months, and is renewable depending on performance and availability of resources. The Alliance offers a multicultural, collegial research environment with competitive salary and excellent benefits. The Alliance is an equal opportunity employer, and strives for staff diversity in gender and nationality.

**Applications**

Applicants are invited to visit [http://ciat.cgiar.org/ciat-jobs](http://ciat.cgiar.org/ciat-jobs) to get full details of the position and to submit their applications. Applications **MUST** include reference number **Ref: RFP 102012-Environmental Modeler – Postdoctoral** as the position applied for. Applications should be saved as one document using the candidate’s lastname, firstname for ease of sorting.
The Alliance does not charge a fee at any stage of the recruitment process (application, interview meeting, processing or training). The Alliance also does not concern itself with information on applicants' bank accounts.

**Applications closing date: 13th August 2021**

Please note that email applications will not be considered

Only shortlisted candidates will be contacted.