

## **Post Doctoral Scientist: Regional Evaluation of the Productivity and Economic Impacts of Soil Interventions**

The International Center for Tropical Agriculture (CIAT) – a member of the CGIAR Consortium – develops technologies, innovative methods, and new knowledge that better enable farmers, especially smallholders, to make agriculture competitive and profitable as well as sustainable and resilient. Headquartered near Cali, Colombia, CIAT conducts research for development in tropical regions of Latin America, Africa, and Asia. [www.ciat.cgiar.org](http://www.ciat.cgiar.org)

CGIAR is a global research partnership for a food secure future. Its science is carried out by the 15 research centers of the CGIAR Consortium in collaboration with hundreds of partner organizations. [www.cgiar.org](http://www.cgiar.org) The CGIAR has a portfolio of global research programs to implement a recently agreed strategy of research for development. Key areas within the strategy and the portfolio are farming systems intensification, reducing risk for vulnerable populations, and sustainable management of natural resources in landscapes to benefit the poor.

The Tropical Soil Biology and Fertility Institute (TSBF) joined CIAT in 2001, and since then has grown and evolved to become one of the three research areas of CIAT. Taking forward the original focus of TSBF, scientists at CIAT are working at the interface between agriculture and ecology to achieve durable food security, particularly in sub-Saharan Africa, but with a global agenda. CIAT's soils research is extremely well placed to contribute in the reformed CGIAR. To build up the momentum of this work, CIAT is recruiting new members for its soils research team.

CIAT has initiated an alliance with IFPRI ([www.ifpri.cgiar.org](http://www.ifpri.cgiar.org)) to assess the potential broad-scale productivity and economic impacts of promising soil fertility intervention options, and the alliance seeks to recruit a post-doctoral scientist to implement and further develop this line of research. The scientist will work closely with the IFPRI HarvestChoice team engaged in modeling spatial and temporal variability in crop productivity, crop and fertilizer prices, and input value cost ratios (VCR) across regional landscapes and will, furthermore, create functional linkages to the work of CIAT scientists on land degradation surveillance and advanced soil mapping.

As a core member of this joint team, the candidate will be expected to work with a variety of data from household survey and market information to soil health indices and ecosystem frameworks. These data will be used with biophysical and economic modeling tools to assess the potential impacts of broad-scale adoption of a range of soil-related interventions. The candidate will apply agronomic, spatial analysis and modeling skills, and specifically explore the scope for improving the strategic effectiveness of investments in research, extension and improved farmer practices through the use of more and better soil information. S/he will also be expected to engage actively with a wide range of research and development practitioners to ensure that the outputs of this work translate into relevant, accessible and actionable knowledge products that meet the needs of those user groups.

### Role and Responsibilities

- Contribute expertise and research innovation in the areas of soils and cropping system productivity modeling at a regional scale within the context of on-going initiatives, and in collaboration with an established team of senior scientists
- Publish results in peer reviewed journals
- Supervise technical staff and graduate students
- Engage in learning with partners and translate those learnings into improved design of the research and outreach efforts
- Contribute to the design, development, and delivery of user-focused knowledge products

### Requirements

- A PhD in Geography, Soil Science, Agronomy, Natural Resources Management, Natural Resources Economics, Spatial Analysis (GIS) or related discipline.
- At least two years of relevant research experience in farming systems in developing countries.
- Knowledge and skills in soil fertility or crop growth modeling and in the use of GIS/spatial analysis tools.
- Understanding of smallholder farming systems in sub-Saharan Africa, the constraints of smallholder farmers, and the role of research in development processes.
- Proactive perspective with interest and ability in the integration and synthesis of knowledge across biophysical and socio-economic domains
- Demonstrated interest in and ability to publish in peer-reviewed international journals
- Proven interpersonal skills and ability to work with diverse teams representing different cultural and professional backgrounds
- Willingness to live in Nairobi and travel widely in the region
- Excellent writing skills and able to write clearly and concisely in English

### Terms of employment

The Post Doctoral Scientist will report to a Senior Scientist at CIAT in undertaking a work plan jointly agreed between CIAT and the IFPRI HarvestChoice team leader. The work plan will be agreed on an annual basis, but will be jointly reviewed on a six-monthly basis by the CIAT Senior Scientist and the IFPRI team leader. S/he will be based in Nairobi, Kenya and the contract will be for an initial 2 year period, subject to a probation period of six (6) months. CIAT will be responsible for performance appraisals and evaluation of the Post Doctoral scientist in consultation with IFPRI. CIAT offers internationally competitive salary and benefits packages. CIAT is an equal opportunity employer, and strives for staff diversity in gender and nationality. Female candidates from Latin America, Africa, and Asia are encouraged to apply.

### Applications

Applicants are invited to send a cover letter illustrating their suitability for the above position against the listed qualifications, competencies, skills together with a detailed curriculum vitae, including names and addresses of three referees knowledgeable about the candidate's professional qualifications and work experience. All correspondence should be addressed to the CIAT Human Resources Office to Catalina Montoya ([c.m.ruiz@cgiar.org](mailto:c.m.ruiz@cgiar.org)) and Alice Kareri ([a.kareri@cgiar.org](mailto:a.kareri@cgiar.org)) and should clearly indicate ***"Regional Evaluation of Soil Interventions"*** on their application letters or email submissions.

**Closing date for applications: 15 June 2012**