Geodatabase Manager (Ref No: DDG-R4D/GDB/M/09/22)

Background: The International Institute of Tropical Agriculture (IITA) invites applications for the internationally recruited position of **Geodatabase Manager.**

The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa's most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. Working with various partners across sub-Saharan Africa, we improve livelihoods, enhance food and nutrition security, increase employment, and preserve natural resource integrity. IITA is a member of CGIAR, a global agriculture research partnership for a food secure future. Please visit http://www.iita.org/ for more information on IITA.

The Sustainable Intensification of Mixed Farming Systems Initiative aims to provide equitable, transformative pathways for improved livelihoods of actors in mixed farming systems through sustainable intensification within target agro-ecologies and socio-economic settings. Through action research and development partnerships, the Initiative will improve smallholder farmers' resilience to weather-induced shocks, provide a more stable income and significant benefits in welfare, and enhance social justice and inclusion for 13 million people by 2030. Activities will be implemented in six focus countries globally representing diverse mixed farming systems as follows: Ghana (cereal–root crop mixed), Ethiopia (highland mixed), Malawi: (maize mixed), Bangladesh (rice mixed), Nepal (highland mixed), and Lao People's Democratic Republic (upland intensive mixed/ highland extensive mixed). In each of these countries, the Initiative's objectives will be achieved through:

- Analysing the status, trends, and future dynamics of mixed farming systems to identify entry points for equitable sustainable intensification, mitigate negative impacts of change, and seize emerging opportunities for livelihoods.
- Building methods and tools for sustainable intensification of mixed farming systems to support decisions on what kind of sustainable intensification might work where, and for whom, in specific contexts.
- Participatory co-design of mixed farming systems with evidence-based, validated sustainable intensification innovation packages that are responsive to improving efficiency, equity, and resilience, in regions where mixed farming systems dominate the landscape.
- Advancing and supporting scaling of innovations, through strategic partnerships and building the capacity of relevant actors in scaling approaches — a gender-transformative approach will be central to all innovation and scaling design to enhance equity.
- Capacity-building for mixed farming system design and analyses, to support long-term impact on university and college students, scientists, extension agents, farmers, private sector, policymakers, and development actors.

Position Responsibilities
- Design and populate a relational geodatabase with structured and non-structured data representing environmental and socio-economic phenomena that are appropriate for agricultural modeling.

- Standardize data in the Initiative's geodatabase and maintain updated metadata to conform to Open Geospatial Consortium (OGC) standards.
- Automate retrieval, archival, and processing of spatial and non-spatial data from multiple sources using Google Earth Engine (GEE), R, python, or CG Labs.
- Maintain version control of data processing routines using GitHub and make the Initiatives data Findable, Accessible, Interoperable, and Reusable (FAIR).
- Design mobile-based survey data collection tools such as ODK, KoboCollect, and SurveyCTO.
- Contribute to data visualization through maps and graphs to reveal spatial and temporal trends.
- Perform any other job-related duties as may be assigned.

Educational Qualifications

The candidate should have an advanced university Degree (MSc or Ph.D.) in Geography, Geomatics, Data Science, or Environmental Management with a specialization in Geographic Information Systems or other related fields.

Core Competencies

- At least 3 years of hands-on experience on the management of distributed or relational geodatabases such as PostgreSQL, PostGIS, SQL Server, and enterprise geospatial databases engine (ArcSDE), data modeling, and experience with related tools.
- Proficiency in programming using Google Earth Engine (GEE), R or python, or CG Labs.
- Demonstrated proficiency in version control tools and developing good practices (well-structured, modular code) and such as GitHub will be an added advantage.
- Experience in making spatial data and information and services FAIR – Findable, Accessible, Interoperable, and Reusable.
- Experience with data visualization and creativity in summarizing complex datasets to communicate key messages to non-expert audiences.
- Demonstrated ability to write and publish journal articles.
- Ability to work as a member of a multi-disciplinary or transdisciplinary team in a cross-cultural environment.
- Fluency in English with excellent verbal and written communication skills.

Duty Station: Nairobi, Kenya.

General information: The contract will be for an initial period of two years. IITA offers an internationally competitive remuneration package paid in US Dollars.

Applications: Applications must include a cover letter, which should address how the candidate's background/experience relates to the specific duties of the position applied for, curriculum vitae, and names and addresses of three professional referees (which **must** include either the Head of the applicant's current or previous organization or applicant's direct Supervisor/Superior at his/her present or former place of work). The application should be addressed to the Head of Human Resources. Please complete our online application form using this link: http://www.iita.org/careers

Closing Date: 6th October 2022

IITA is an equal opportunity employer and is committed to building a diverse workforce, particularly welcoming applications from women.

While all applications will be acknowledged, please note that only shortlisted candidates will be contacted.