Join CIFOR-ICRAF and make a difference!

International Scientist - Spatial Data Science and GIS – K4GGWA (Ref. No.2024007)

CIFOR-ICRAF brings more than 75 years of experience in harnessing the power of trees, forests, and agroforestry landscapes to address the most pressing global challenges of our time – biodiversity loss, climate change, food security, livelihoods, and inequity. It has partnerships in 64 countries, 159 funding partners and 192 active projects, alongside more than 2,200 completed projects across 92 nations. The organisation has an annual budget of USD 100 million, and a combined legacy investment of USD 2 billion in research and technology, policy, and development. On average, CIFOR-ICRAF research is cited nearly 137 times a day and appears in global media more than 3,000 times per year. CIFOR and ICRAF merged in 2019 and are both international organizations and CGIAR Research Centres. Learn more at cifor-icraf.org.

CIFOR-ICRAF is looking for a:  
International Scientist- Spatial Data Science and GIS – K4GGWA

Overview
Under the supervision of the head of SPACIAL and the Co-lead for the Knowledge for Great Green Wall (K4GGWA) project in West Africa, the Spatial Data Scientist and GIS expert will focus primarily on GIS analysis tasks, supporting the K4GGWA project team. Tasks will include engagement with partners and project stakeholders across GGW countries, including the Pan African Agency and UNCCD Accelerator. Spatial data science and GIS tasks will include data analysis and mapping using QGIS, R Statistics or Python, particularly in relation to the mapping and monitoring of land health indicators. Other tasks will include identification of data analytics problems, cleaning, and validation of data to ensure accuracy, completeness, and uniformity. The position will also engage with multiple themes and units within CIFOR-ICRAF on scientific project tasks, particularly around access to and use of spatial data, database development and management, report writing, and scientific publications. Finally, the position will contribute significantly to capacity development of regional and national GGW bodies and stakeholders to assess, map and monitor a wide range of biophysical and land health indicators.

Summary of responsibilities
1. Spatial analysis and mapping (GIS) using existing data at country and regional level, including from GGW partner countries and agencies. Support project activities to strengthen the capacity of regional and national GGW bodies and stakeholders to assess, map and monitor a wide range of biophysical and land health indicators; responding to country needs, including to track the effectiveness of land restoration implementation, target interventions, and to guide policy; use of a wide range of available tools, including citizen science apps and relevant FAO.
2. Basic remote sensing analysis such as calculations and analysis of vegetation indices and land cover classes. Support in the development and deployment of machine learning models using ground truth and remote sensing data to assess various aspects of ecosystem health at scale.
3. Contribute to the preparation of annual state of land (use change, health, incl. trends in climate) and vegetation maps, and knowledge products, building on existing tools and analysis, where relevant, including the EU's 'Africa Knowledge Platform'.

4. Represent CIFOR-ICRAF at conferences and/or meetings from a technical remote sensing / data science perspective.

5. Manage spatial data science fellows and interns as needed.

Requirements
- MSc in GIS, spatial data science or related field.
- Some background in remote sensing, whether from satellite or from aerial/drone imagery.
- High level of proficiency in QGIS, some experience with computer programming languages such as R or Python.
- Experience in handling spatial data.

Personal attributes and competencies:
- Experience with interactive decision support systems (eg. dashboards).
- Fluent in French and strong English writing and presenting skills.

Terms and conditions
- This is a Globally Recruited position. CIFOR-ICRAF offers competitive remuneration in local currency commensurate with skills and experience.
- The duty station will be in Nairobi, Kenya/ West Africa CIFOR-ICRAF Offices.

Application process
- Go to [http://worldagroforestry.org/working-for-icraf/vacancies](http://worldagroforestry.org/working-for-icraf/vacancies)
- A cover letter illustrating your suitability for the position against the listed requirements and salary expectations,
- A detailed and updated curriculum vitae,
- The names and addresses of three referees, including telephone and email addresses.
- The application deadline is 14 March 2024.
- We will acknowledge all applications but will only contact short-listed candidates.

CIFOR-ICRAF is an equal opportunity employer. Staff diversity contributes to excellence.