Postdoctoral Fellowship in Agricultural Economics: Climate modelling and Agricultural Productivity

The Department of Agricultural Economics at Stellenbosch is seeking applications for a **Postdoctoral Fellowship** focused on **climate, agricultural productivity**, and **data-driven economic research**. This position offers an opportunity to contribute to innovative research examining how climate and technological advancements impact agricultural productivity, drawing from large datasets and econometric modelling to inform future food security and policy decisions.

Position Overview: The position's primary focus is research on agricultural productivity and climate; the postdoctoral fellow will also collaborate with the **"Southern African Trees for Climate Resilience"** project. This interdisciplinary project, undertaken by the Schools for Climate and Data Science and the AgroInformatics Initiative at Stellenbosch University, seeks to develop a comprehensive data resource for indigenous tree species to support climate resilience and reforestation efforts.

Key Responsibilities:

- Conduct rigorous econometric analysis of the relationship between climate variables and agricultural productivity.
- Collaborate on climate resilience projects, including developing reforestation and urban afforestation datasets.
- Analyse large-scale datasets integrating climate and productivity data and species trait and climate relationship data.
- Employ statistical and machine learning techniques for agricultural productivity analysis.
- Contribute to interdisciplinary projects addressing the impacts of climate change on agriculture and ecosystem resilience.

Qualifications:

- PhD (**completed within the last 5 years**) in Agricultural Economics, Economics, Environmental Economics or Environmental Science.
- Experience with econometrics, large datasets, and climate data analysis.
- Proficiency in Python, with an interest in machine learning techniques.
- Strong background in agricultural productivity, climate, or economic modelling.
- Ability to work independently and collaborate across disciplines.

Why Join Us?

This fellowship offers a unique opportunity to engage in cutting-edge research at the interface of **agriculture, climate resilience**, and **data science**. You will work on projects that combine advanced data analytics with real-world applications in climate adaptation, agricultural productivity, and ecosystem sustainability.

Duration: The fellowship is 12 months and can be extended to a second year based on performance and funding availability.

Commencement of Duties: 1 February 2025

Application Process: Send a letter of application accompanied by a comprehensive curriculum vitae, including a list of publications and the names and contact details of at least two referees, for attention to Dr Jan C Greyling at jancg@sun.ac.za. Applicants should request their referees to forward confidential reports directly to the same email address by the closing date.

Closing Date: 15 December 2024

Stipend: Annual stipend value: R420 000. Postdoctoral fellows are not appointed as employees, and their fellowships are awarded tax-free. Therefore, they are not eligible for employee benefits.

Enquiries: Dr Jan C Greyling – jancg@sun.ac.za