Departement Landbou-ekonomie



AGRISCIENCES
EYENZULULWAZI NGEZOLIMO

**AGRIWETENSKAPPE** 

## **Postdoctoral Fellowship**

### **Scope of Research:**

The Department of Agricultural Economics at Stellenbosch University seeks to recruit a postdoctoral researcher with a keen interest in one of the following themes:

### Value chain management:

- Focus on value chains in the food and agricultural sectors of the developing world.
- The research concerns value chain visibility, value chain collaboration, value chain planning, and transport planning. We welcome diverse research methodologies including theoretical, empirical, algorithmic, and/or computational approaches.

#### **Environmental and conservation:**

• The focus of this new research direction is to use secondary data for environmental and natural resource policy analysis. The postdoc fellow should be familiar with existing relevant data repositories (World Bank, FAO, Climate and Weather data, World Bank climate change knowledge portal, IFRI, etc.) and the data wrangling tools required to extract information from them and create time series or panel data structures. The primary idea is to use such data structures to find cointegration relationships and use them for structural analysis with applications to forestry, fisheries, and mining.

# Application of oiconomy pricing method on a South African agricultural export product.

Still under development, the basic idea of oiconomy pricing is to reconcile market prices of
products to be more inclusive of hidden costs and benefits. Oiconomy pricing differentiate
itself from shadow pricing by including costing of mitigation procedures which makes for
more inclusive decision making. The method has been applied in several case studies but is
in need for further contextualisation – especially for developing economies.

This theme is in collaboration with Copernicus Institute of Sustainable Development at Utrecht University who has approached Stellenbosch University to collaborate to further develop the method by means of a South African application. The research will be part explorative and part application.

# **Expansion of BRICS**

• Iran applied to join BRICS on 29 June 2022, and indications are that Argentina is planning to do the same. This comes amidst the war between Russia and Ukraine. The potential impact of this change to BRICS membership on South African trade is of interest. International trade patterns can be analyzed with either global general equilibrium models such as the GTAP model, or econometric models such as the gravity model. Skills in either one of the techniques will be required.

### **Other duties:**

Teaching activities include teaching at undergraduate and graduate level for a maximum of 30% of total working hours.

### **Duration:**

The duration of the postdoctoral research position is 12 months with the possibility of renewal for a second year depending on performance.

#### General:

The primary duty as a postdoctoral researcher is to perform research and to support with some teaching activities. The research is to be conducted in collaboration with academic staff, postgraduate students, and industry partners. It is also expected that the research be published in high quality journals.

#### Requirement:

Qualification: A PhD that have been awarded in the last five years.

Areas of specialisation: Agricultural Economics or Economics or Operations and Supply Chain Management or Management Science or Industrial Engineering, or a closely related discipline. Familiarity with econometrics, optimization, discrete event simulation, programming and game theory is a plus.

### **Commencement of duties:**

As soon as possible

# **Closing date for applications:**

22 August 2022

### Information required:

Send a letter of application, accompanied by a comprehensive curriculum vitae, including list of publications and the names and contact details of at least two referees, to:

Elizabeth von Wechmar

E-mail address: <a href="mailto:ekvw@sun.ac.za">ekvw@sun.ac.za</a>

Note: Applicants should request their referees to forward confidential reports by the closing date directly to the same address.

# **Enquiries:**

Should you have any enquiries please e-mail Ms Elizabeth von Wechmar at e-mail address: <a href="mailto:ekvw@sun.ac.za">ekvw@sun.ac.za</a>