

# Researcher in natural resource economics for agro-ecological transitions

## Context

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### Future organization

CIRAD, the French Agricultural Research Centre for International Development, works with its partners in southern countries to generate and pass on new knowledge to support agricultural development and innovation.

It has one main objective: to build sustainable farming systems for tropical and Mediterranean regions capable of feeding ten billion human beings by 2050 while preserving the environment.

Find out more : [www.cirad.fr/en](http://www.cirad.fr/en)

### Reference

P-ES-GEAU-2023-02-CDI-7138

### Publication end date

27/03/2023

## Position description

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### Category

Science - Economic and management science

### Contract

CDI

### Job title

Researcher in natural resource economics for agro-ecological transitions

### Beginning date

04/09/2023

### Job description

In a context of climate change, agro-ecological transitions in irrigation systems receive currently increased attention to move towards sustainable and resilient irrigation practices that rely on ecological processes and natural resources. Such transitions involve a shift in the way we think about and manage irrigation systems, and a focus on the interactions between irrigation, crops, livestock and the environment, while supporting the revitalization of rural communities and territories through sustainable local food systems and new economic opportunities. However, there has been little research into agroecological transitions in irrigated territories, particularly in arid and semi-arid environments. When available, this research often focuses on agronomic, hydrological and ecological aspects and much less on the economic dimensions of these transitions.

As an economist within an interdisciplinary team, you will play a key role in analysing the socio-economic conditions and challenges of agro-ecological transitions for irrigated territories in semi-arid regions. By working to facilitate the adaptation of stakeholders to ongoing changes, you will contribute to the development of solutions that support the transition to agroecological practices. In particular, you will contribute to:

- Study the economic dynamics within irrigated territories, analysing and evaluating agro-ecological options for the sustainable intensification of irrigated areas, evaluating the additional costs and risks borne by farmers/communities/sectors in increasingly uncertain climatic and market environments
- Analyse and anticipating the response of stakeholders (farmers, intermediaries, managers, policy makers) to agro-ecological policies and innovations, in particular by means of controlled experiments enabling their preferences to be established and their economic behaviour to be explained
- Study the potential of water and agricultural policies, economic levers/tools and institutional innovations intended to promote agro-ecological practices in irrigated systems and water territories in stakeholders' decisions. By working in collaboration with rural populations, users, and agricultural and water managers, you will conduct a comprehensive diagnosis of the challenges and opportunities for agro-ecological transitions in irrigated territories. Based on this diagnosis, you will develop models for interpreting, analysing, and evaluating the practices, social representations, and behaviour of stakeholders. These models will help to identify the conditions for and feasibility of change at various scales, including the household, farm, rural community, sector, territory, or catchment level. You will join an interdisciplinary team, conceiving operational methods and protocols in the laboratory and in the field. These protocols may be included in participatory approaches, by offering communities the opportunity to jointly construct experimental protocols and analyse the results

### Desired profile

PhD in Economics or Agricultural Economics, specialising in natural resource economics.

Experience in water conservation and water demand management is required.

Experience in obtaining and analysing quantitative data from social and economic sciences, as well as in interpreting qualitative data from surveys and group workshops.  
Experience in close interactions with stakeholders in a context of agro-ecological transition.  
Experience in evaluating agro-ecological production systems or the preferences of economic stakeholders (users and managers of water resources).  
Experience in conducting researches in partnership with stakeholders in countries of the Global South  
Experience in designing and implementing field surveys, as well as experimental protocols in the lab and in the field.  
Strong analytical and problem-solving skills.  
Excellent written and verbal communication skills in English.

**Location : Southern Africa.**

CIRAD, useful research for a more sustainable, inclusive world



**Position constraints**

- Work at a computer screen for more than 4 hours
- Frequent travel in France and abroad

**Socio-professional category**

Managers

**France base salary, excluding expatriation allowances if applicable**

27-37 K€

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Information

**Job location**

South Africa

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Description future location

**Location**

Métropole

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Information

**Hiring Manager first name**

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