

Australian Government

Australian Centre for International Agricultural Research

Global Program

User-driven approaches for productive smallholder irrigation in Mozambique

Overview

The Mozambique Government has made significant investments to revitalise and expand smallholder irrigation schemes, in collaboration with their development partners.

There are also farmer-led irrigation schemes which reportedly cover at least twice the area of the government-funded smallholder irrigation. All schemes work to increase agricultural productivity, food security and climate resilience, and reduce poverty.

However, inefficiencies remain and constrain the performance of the irrigation schemes. In addition, farmers lack the resources and skills to sustain such schemes without ongoing assistance, and government rehabilitation and expansion programs lack the appropriate strategies to keep the schemes working effectively.

This project will identify the challenges and design and test innovative user-driven approaches to increase the economic gains of 10 government-funded and farmerled irrigation schemes in Gaza and Manica provinces, in order to improve the economic efficiency and sustainability of Mozambique's irrigation schemes.





KEY FACTS

ACIAR Project No. GP-2019-174 Duration: April 2019 to September 2022 (3.5 years) Target areas: Mozambique Budget: A\$1,905,890

Project Leader Mario Chilundo, The Eduardo Mondlane University

Key partners The National Irrigation Institute

ACIAR Research Program Manager Dr Eric Huttner



Objective

The project's goal is to improve the economic efficiency and sustainability of Mozambique's irrigation schemes in order to increase productivity, food security and climate resilience, and reduce poverty.

The objectives are to:

- Develop strategies to increase the adoption of innovative soil and water management technologies.
- Double the yields of selected crops and increase the incomes of more than 1000 men, women and young farmers.
- Increase the productivity, profitability and institutional sustainability of small-scale irrigation schemes.

Expected scientific results

- Development of innovative soil and water management technologies and practices that can be easily adopted by smallholder operations.
- Comparison of changes to farm productivity and profitability when using different combinations of practices – technical (soil and water management), social (business plans and market links) and institutional (innovation platforms and water-user associations).
- A gender analysis will reveal the underlying power dynamics, roles, preferences, and decision-making processes in relation to water access, use and management.

Expected impact/outcomes

- Increased use of soil and water management technologies.
- Yields doubled for selected crops and increased incomes for more than 1000 farmers through both increased production and higher crop prices due to better market access.
- Reduced competition for shared resources at community and household levels, increased farmer willingness to participate in community institutions and stronger, more inclusive farmer and water-user organisations.
- Increased skill-base among extension workers in water management, business planning, microfinance, youth business incubation and farmer training.





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