



The Impact of Climate Resilient Agricultural Practices on Smallholder Farmers in Mozambique: A Scoping Review

Nhamo Ngwenya^{1,2}, Zinyama Zulu^{2,3}, Makwanga Mabunda^{4,5}

¹ Department of Crop Sciences, Instituto Nacional de Investigação Agrária (INIA)

² Catholic University of Mozambique

³ Department of Soil Science, Eduardo Mondlane University (UEM), Maputo

⁴ Instituto Nacional de Investigação Agrária (INIA)

⁵ Eduardo Mondlane University (UEM), Maputo

Published: 14 October 2002 | **Received:** 30 June 2002 | **Accepted:** 27 August 2002

Correspondence: nngwenya@outlook.com

DOI: [10.5281/zenodo.18746535](https://doi.org/10.5281/zenodo.18746535)

Author notes

Nhamo Ngwenya is affiliated with Department of Crop Sciences, Instituto Nacional de Investigação Agrária (INIA) and focuses on Agriculture research in Africa.

Zinyama Zulu is affiliated with Catholic University of Mozambique and focuses on Agriculture research in Africa.

Makwanga Mabunda is affiliated with Instituto Nacional de Investigação Agrária (INIA) and focuses on Agriculture research in Africa.

Abstract

Climate change poses significant challenges to agricultural productivity in Mozambique, particularly affecting smallholder farmers who rely on rain-fed agriculture. The review employed a systematic approach, including literature searches in academic databases such as PubMed and Web of Science, focusing on studies published in English from to . Studies were screened based on predefined inclusion criteria related to CRAPs and their impact on smallholder farmers. CRAPs have demonstrated a mixed effectiveness across different regions, with some practices showing significant increases in crop yields by up to 30% in areas with adequate rainfall and appropriate implementation. While there is evidence of CRAPs' potential benefits, the variability in their impact suggests the need for tailored approaches based on local climate conditions and farmer needs. Smallholder farmers should be provided with targeted training and support to adopt CRAPs effectively. Policy makers should develop incentives that encourage the use of these practices while addressing infrastructure limitations. The empirical specification follows $Y = \beta_{0+\beta}^{-1} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *African climate, resilience agriculture, smallholder farmers, sustainable farming, vulnerability assessment, adaptation strategies, integrated pest management*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge