African Applied Soil Science (Agri/Earth Science)

# Soil Fertility and Diversity: Sustainable Practices Among Mozambican Smallholders

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**Published:** 27 July 2005 | **Received:** 23 February 2005 | **Accepted:** 16 June 2005

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**DOI:** 10.5281/zenodo.18811681

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## Abstract

This Perspective Piece focuses on sustainable land-use practices among smallholder farmers in rural Mozambique, with a particular emphasis on soil fertility management and crop diversity promotion. No empirical results are provided as this Perspective Piece aims to present a review of existing literature and propose new methodologies rather than reporting data from controlled experiments. The review underscores the potential for smallholder farmers to adopt integrated soil management practices that not only improve soil fertility but also support biodiversity and resilience against climate variability. Farmers should be encouraged to implement a combination of cover cropping, reduced tillage, and intercropping strategies. Policy makers are advised to promote educational programmes on sustainable farming techniques and provide incentives for implementing these practices. The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** *Sustainable Agriculture, Soil Fertility Management, Crop Diversity, Smallholder Farmers, Rural Development, Agroecology, Integrated Pest Management*

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