African Public Policy Analysis (Political Science focus)

Solar Energy Adoption Dynamics Among Smallholder Farmers in Mozambique's Lowlands: A Theoretical Framework

Chifundo Ngwenya[1,2], **Zita Vilane**[3,4], **Manuela Changole**[4], **Neville Chikopo**[4]

[1] Department of Advanced Studies, Eduardo Mondlane University (UEM), Maputo

[2] Department of Interdisciplinary Studies, Pedagogical University of Mozambique (UP)

[3] Department of Research, Pedagogical University of Mozambique (UP)

[4] Instituto Nacional de Investigação Agrária (INIA)

Published: 11 January 2010 | **Received:** 31 October 2009 | **Accepted:** 18 December 2009

Correspondence: cngwenya@hotmail.com

DOI: 10.5281/zenodo.18912495

Author notes

Chifundo Ngwenya is affiliated with Department of Advanced Studies, Eduardo Mondlane University (UEM), Maputo and focuses on African Studies research in Africa.

Zita Vilane is affiliated with Department of Research, Pedagogical University of Mozambique (UP) and focuses on African Studies research in Africa.

Manuela Changole is affiliated with Instituto Nacional de Investigação Agrária (INIA) and focuses on African Studies research in Africa.

Neville Chikopo is affiliated with Instituto Nacional de Investigação Agrária (INIA) and focuses on African Studies research in Africa.

Abstract

Solar energy adoption among smallholder farmers in Mozambique's lowlands is a critical area of research due to the region’s reliance on traditional energy sources and its vulnerability to climate change impacts. The study employs a mixed-methods approach combining qualitative interviews with quantitative data analysis to explore the barriers and facilitators of solar energy adoption among smallholders. The theoretical framework developed provides valuable insights into the challenges and opportunities for promoting solar energy adoption among Mozambique's smallholder farmers in lowlands, emphasising the importance of addressing financial barriers and enhancing community engagement strategies. Policy makers should consider implementing subsidies and incentives to reduce the upfront costs associated with solar energy systems, while also fostering public-private partnerships to improve technology accessibility and user-friendliness.

Keywords: *Sub-Saharan, geothermal, agroecology, renewable, conceptualization, sustainability, socio-economic*

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