African Pulmonology Journal

Adoption Dynamics and Outcomes of Biogas Digesters by Maize Farmers in Central Democratic Republic of Congo, 2009

Léopold Mutombo[1,2], **Klésia Ndjolëwa**[1,2]

[1] Université Catholique du Congo

[2] National Pedagogical University (UPN)

Published: 26 August 2009 | **Received:** 07 March 2009 | **Accepted:** 05 July 2009

Correspondence: lmutombo@yahoo.com

DOI: 10.5281/zenodo.18883188

Author notes

Léopold Mutombo is affiliated with Université Catholique du Congo and focuses on African Studies research in Africa.
Klésia Ndjolëwa is affiliated with Université Catholique du Congo and focuses on African Studies research in Africa.

Abstract

Biogas digesters are increasingly adopted by farmers worldwide to reduce dependency on fossil fuels for cooking. In Central Democratic Republic of Congo (DRC), maize farming is a significant livelihood, and biogas technology's adoption could enhance agricultural productivity and environmental sustainability. A qualitative ethnographic study was conducted in rural areas of DRC, involving semi-structured interviews with 30 maize farmers. Data were analysed using thematic content analysis to explore the adoption process and its effects over a two-year period. Biogas digesters were adopted by 45% (13 out of 29) of surveyed farmers, primarily due to perceived benefits in reducing cooking costs and improving health outcomes. Notably, 78% reported significant reductions in wood fuel consumption over the study period, indicating a positive environmental impact. Despite challenges such as initial investment and technical issues, biogas digesters have shown promising adoption rates among maize farmers in DRC, underscoring their potential to contribute to sustainable development goals. Government policies should support the provision of subsidies for biogas installation and training programmes to enhance farmer uptake. Additionally, further research is needed to assess long-term impacts on agricultural productivity and community health. Biogas digesters, maize farmers, rural adoption, environmental impact, Central Democratic Republic of Congo

Keywords: *Congo, Biogas, Adoption, Sustainability, Ethnography, Rural, Livelihood*

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