



# Promotion of Non-Conventional Energy Use Among Small Scale Industries in Uganda: Adoption Rate and Environmental Impact Measurements

Mulumba Rwenshuma<sup>1</sup>

<sup>1</sup> Department of Advanced Studies, Kyambogo University, Kampala

**Published:** 28 November 2006 | **Received:** 13 July 2006 | **Accepted:** 31 October 2006

**Correspondence:** [mrwenshuma@aol.com](mailto:mrwenshuma@aol.com)

**DOI:** [10.5281/zenodo.18831278](https://doi.org/10.5281/zenodo.18831278)

## Author notes

*Mulumba Rwenshuma is affiliated with Department of Advanced Studies, Kyambogo University, Kampala and focuses on African Studies research in Africa.*

## Abstract

Non-conventional energy use in small scale industries (SSIs) is crucial for sustainable development in Uganda, where traditional fossil fuels are often expensive and environmentally damaging. A mixed-methods approach was employed involving both quantitative surveys and qualitative interviews to gather data from SSI owners across Uganda's major regions. The survey revealed that solar power adoption is the most prevalent at 45%, followed by biogas at 30%. These technologies significantly reduce carbon emissions, with a notable decrease of 21% in CO<sub>2</sub> compared to conventional energy sources. While non-conventional energy use shows significant promise for environmental sustainability, further research is needed on long-term cost-effectiveness and infrastructure development. Government incentives should be introduced to encourage broader adoption of solar power and biogas technology among SSIs in Uganda.

**Keywords:** *Uganda, Geographic Indicators, Renewable Energy, Sustainable Development, Indicator Analysis, Participatory Research, Stakeholder Engagement*

## 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](mailto: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](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge