



# Renewable Energy Microgrids and School Attendance Among Adolescent Migrants in Kenya,

Oluoch Agutu<sup>1,2</sup>, Kioni Chege<sup>3,4</sup>, Mwihaki Okoth<sup>5,6</sup>

<sup>1</sup> Pwani University

<sup>2</sup> Department of Research, Strathmore University

<sup>3</sup> Department of Interdisciplinary Studies, Strathmore University

<sup>4</sup> Jomo Kenyatta University of Agriculture and Technology (JKUAT)

<sup>5</sup> Department of Research, Pwani University

<sup>6</sup> Department of Interdisciplinary Studies, Jomo Kenyatta University of Agriculture and Technology (JKUAT)

**Published:** 11 October 2006 | **Received:** 22 June 2006 | **Accepted:** 12 August 2006

**Correspondence:** [oagutu@gmail.com](mailto:oagutu@gmail.com)

**DOI:** [10.5281/zenodo.18840337](https://doi.org/10.5281/zenodo.18840337)

## Author notes

*Oluoch Agutu is affiliated with Pwani University and focuses on Law research in Africa.*

*Kioni Chege is affiliated with Department of Interdisciplinary Studies, Strathmore University and focuses on Law research in Africa.*

*Mwihaki Okoth is affiliated with Department of Research, Pwani University and focuses on Law research in Africa.*

## Abstract

This study examines the impact of renewable energy microgrids on school attendance among adolescent migrants in Kenya. A comparative study approach was used, analysing data from two distinct regions where renewable energy microgrids were introduced and evaluated against areas without such systems. The research utilised surveys and interviews to collect primary data from adolescents and educators, providing insights into the impact of energy access on educational outcomes. The analysis revealed a statistically significant increase in school attendance rates among adolescent migrants who lived near renewable energy microgrids compared to those in non-microgrid regions ( $p < 0.05$ ). This study demonstrates that the introduction of renewable energy microgrids can substantially improve educational participation, particularly among adolescent migrant populations. Policy makers should consider integrating renewable energy projects into school infrastructure to enhance educational opportunities for vulnerable youth groups in Kenya.

**Keywords:** Kenya, Microgrids, Renewable Energy, Adolescent Migration, School Attendance, Development Economics, Comparative Analysis

## 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