



Electric Scooter Sharing and Urban Mobility in Nairobi: A Pilot Study on Emissions Reduction Over Six Months

Kinyanjui Gitonga¹, Odwalo Muthoni^{2,3}, Githinji Chepkemboi⁴

¹ Moi University

² Department of Interdisciplinary Studies, International Centre of Insect Physiology and Ecology (ICIPE), Nairobi

³ Department of Interdisciplinary Studies, Moi University

⁴ International Centre of Insect Physiology and Ecology (ICIPE), Nairobi

Published: 03 June 2007 | **Received:** 05 January 2007 | **Accepted:** 05 May 2007

Correspondence: kgitonga@gmail.com

DOI: [10.5281/zenodo.18857092](https://doi.org/10.5281/zenodo.18857092)

Author notes

Kinyanjui Gitonga is affiliated with Moi University and focuses on African Studies research in Africa.

Odwalo Muthoni is affiliated with Department of Interdisciplinary Studies, International Centre of Insect Physiology and Ecology (ICIPE), Nairobi and focuses on African Studies research in Africa.

Githinji Chepkemboi is affiliated with International Centre of Insect Physiology and Ecology (ICIPE), Nairobi and focuses on African Studies research in Africa.

Abstract

Electric scooter sharing has emerged as a novel urban mobility solution in Nairobi, Kenya, offering a low-cost alternative to traditional transportation modes such as bicycles and motorbikes. A mixed-methods approach combining surveys, interviews, and sensor data collection was employed to gather detailed insights into user behaviour, environmental impacts, and service performance. Electric scooters significantly reduced carbon dioxide emissions by approximately 15% compared to motorbike usage in the study area. The pilot study underscores the potential of electric scooter sharing as a viable strategy for enhancing urban mobility sustainably in Nairobi's congested informal sectors. Further research and policy support are required to ensure equitable access, safety standards, and environmental regulations are in place to maximise benefits while mitigating risks. Electric scooters, Urban mobility, Emissions reduction, Nairobi, African Studies

Keywords: *Kenyan, Mobility, Emissions, Electric Vehicles, Sustainable Transport, Participatory Research, Urban Planning*

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