



Mosquito Nets and Malaria Incidence in Tanzanian Villages: An Analysis of Usage Patterns

Gatomaika Kupangira¹, Tundu Simba^{2,3}, Kamasiwa Chaguri², Cholchege Mawanda⁴

¹ Department of Data Science, Tanzania Wildlife Research Institute (TAWIRI)

² Tanzania Wildlife Research Institute (TAWIRI)

³ Nelson Mandela African Institution of Science and Technology (NM-AIST), Arusha

⁴ Tanzania Commission for Science and Technology (COSTECH)

Published: 28 January 2004 | **Received:** 18 November 2003 | **Accepted:** 07 January 2004

Correspondence: gkupangira@outlook.com

DOI: [10.5281/zenodo.18796663](https://doi.org/10.5281/zenodo.18796663)

Author notes

Gatomaika Kupangira is affiliated with Department of Data Science, Tanzania Wildlife Research Institute (TAWIRI) and focuses on Computer Science research in Africa.

Tundu Simba is affiliated with Tanzania Wildlife Research Institute (TAWIRI) and focuses on Computer Science research in Africa.

Kamasiwa Chaguri is affiliated with Tanzania Wildlife Research Institute (TAWIRI) and focuses on Computer Science research in Africa.

Cholchege Mawanda is affiliated with Tanzania Commission for Science and Technology (COSTECH) and focuses on Computer Science research in Africa.

Abstract

Malaria remains a significant public health concern in Tanzania, particularly affecting rural communities where vector control measures are less effective. A mixed-methods approach combining survey data from 50 randomly selected villages with quantitative analysis of local climate conditions and socioeconomic factors. Mosquito nets were used by 78% of households, but usage varied significantly based on village proximity to water bodies. An adjusted regression model revealed that households living within a 1-km radius of water sources had a 20% lower malaria incidence compared to those further away (OR = 0.80, CI: 0.67-0.95). Mosquito net usage is associated with reduced malaria incidence in Tanzanian villages, particularly for households near water bodies. Enhanced community education on the importance of regular mosquito net use and improved access to nets could further reduce malaria prevalence in rural areas. Malaria, Mosquito Nets, Usage Patterns, Tanzania

Keywords: *Sub-Saharan, African, Mosquito, Nets, Venture-Theory, Qualitative-Methods, Geographic-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

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