User Acceptance and Usage Patterns of Water Quality Monitoring Apps Among Community Members in Kampala, Uganda 2005

James Kizza[1,2], Grace Nakijinja[1,3], Patrick Ssekitarama[4]

[1] Busitema University

[2] Uganda Christian University, Mukono

[3] National Agricultural Research Organisation (NARO)

[4] Department of Interdisciplinary Studies, Busitema University

Author notes

James Kizza is affiliated with Busitema University and focuses on African Studies research in Africa.
Grace Nakijinja is affiliated with Busitema University and focuses on African Studies research in Africa.
Patrick Ssekitarama is affiliated with Department of Interdisciplinary Studies, Busitema University and focuses on African Studies research in Africa.

Abstract

Water quality in Kampala, Uganda is frequently affected by contamination from various sources such as industrial effluents and improper sanitation practices. A mixed-methods approach was employed including a survey targeting 500 randomly selected community residents and qualitative interviews with 20 app users. Data analysis involved both quantitative statistical methods and thematic content analysis. Among the surveyed participants, 67% expressed interest in using water quality monitoring apps, particularly for real-time alerts about potential contamination. Despite initial enthusiasm, continued engagement was hindered by factors such as app functionality issues and lack of awareness about the importance of maintaining safe drinking water sources. Developers should enhance app user interfaces to improve accessibility and incorporate more interactive features. Community health workers can play a crucial role in educating residents about the benefits of using these apps for better water quality management.

Keywords: *Uganda, Geographic Information Systems (GIS), Participatory Monitoring, Community Engagement, Mobile Applications, Technology Adoption, Water Quality Contamination*

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