Biodiversity Conservation in Kenyan Protected Areas: Challenges and Opportunities

Onduru Wafula[1,2]**, Macharia Kamau**[3,4]**, Karuri Orindi**[4,5]**, Kisii Mwangi**[6]

[1] Department of Interdisciplinary Studies, Egerton University

[2] Maseno University

[3] Technical University of Kenya

[4] Department of Research, Maseno University

[5] Kenya Agricultural and Livestock Research Organization (KALRO)

[6] Department of Interdisciplinary Studies, Kenya Agricultural and Livestock Research Organization (KALRO)

Author notes

Onduru Wafula is affiliated with Department of Interdisciplinary Studies, Egerton University and focuses on Environmental Science research in Africa.

Macharia Kamau is affiliated with Technical University of Kenya and focuses on Environmental Science research in Africa.

Karuri Orindi is affiliated with Department of Research, Maseno University and focuses on Environmental Science research in Africa.

Kisii Mwangi is affiliated with Department of Interdisciplinary Studies, Kenya Agricultural and Livestock Research Organization (KALRO) and focuses on Environmental Science research in Africa.

Abstract

Kenya is renowned for its diverse ecosystems spanning savannahs, forests, and coastal regions, which are home to a rich array of flora and fauna. A comprehensive review approach was employed, synthesizing existing literature, reports, and case studies from various sources on biodiversity conservation practices within Kenya's protected areas. Analysis revealed a significant decline (30%) in mammal species diversity across the country's protected areas over the past decade, with threats primarily attributed to habitat loss and poaching activities. These findings underscore the urgent need for enhanced collaboration between governmental bodies and local communities in conservation efforts. The reviewed literature highlights persistent challenges such as inadequate funding, insufficient enforcement of regulations, and a lack of community engagement in biodiversity management. However, there exists potential for leveraging technological innovations like citizen science initiatives to enhance monitoring and conservation activities. In light of the identified issues, it is recommended that policymakers prioritise increased investment in research and development, strengthen regulatory frameworks, and foster closer partnerships between protected area managers and local communities to ensure effective biodiversity preservation in Kenya's diverse ecosystems. Biodiversity Conservation, Protected Areas, Citizen Science, Community Engagement, Policy Mechanisms The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Savannah, Forest, Coastal, Ecosystems, Conservation* □□□

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