

Strategies and Challenges Faced in the Promotion of Sustainability in Queen Elizabeth National Park

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Abstract

The study assessed the strategies employed by Queen Elizabeth National Park management to engage local communities in conservation efforts and the challenges faced. The study employed a cross-sectional research design employing mixed methods (400 Questionnaire and 10 interviews respectively). Data analysis was done using descriptive statistics. The findings showed that the National Park management do engage local communities in conservation efforts with participatory management as the most prevalent. The challenges faced in promoting sustainability were inadequate engagement, human wildlife conflicts, limited funds and resource dependency among local communities. The study concludes that inadequate engagement, limited funding and resource dependence are the major constraints, thus there is the need to enhance enforcement of environmental laws and policies. This can be done by increasing the capacity and coordination of park rangers, integrating technology like drone and camera surveillance, and working closely with local authorities to combat illegal activities.

Keywords: Sustainability, Queen Elizabeth National Park, Conservation, Wildlife, Community, Funding.

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Background to the Study

Globally, the promotion of environmental sustainability has long been shaped by international frameworks and strategic interventions, particularly since the 1972 United Nations Conference on the Human Environment in Stockholm. This momentum increased with the 1987 Brundtland Report, which coined “sustainable development,” and culminated in the adoption of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) (UN, 2019). Developed nations such as the United Kingdom and the United States have since prioritized the integration of sustainability in national park management. For example, the US National Park Service implemented adaptive resource management strategies that integrate scientific research, community education, and technology to monitor ecosystem integrity (NPS, 2021). Similarly, the UK developed sustainability-focused frameworks within protected areas like the Lake District National Park, emphasizing carbon neutrality and community-based tourism (DEFRA, 2020).

However, despite these efforts, challenges like climate change, funding constraints, and conflicting land use persist, demonstrating that the implementation of sustainability strategies is both complex and evolving. In Europe and Asia, the trajectory of conservation practices has further influenced sustainability efforts. European Union directives on biodiversity and landscape protection have enhanced transboundary cooperation in conserving ecological corridors, such as Natura 2000 sites (European Commission, 2020). In Asia, countries like Bhutan and Japan have integrated cultural values into conservation, establishing eco-tourism as a pillar of sustainability (UNEP, 2022). Despite these strategic successes, enforcement challenges, population pressures, and industrial encroachment continue to hinder long-term environmental sustainability. These global shifts have underscored the need for harmonizing conservation science, indigenous knowledge, and local engagement in sustainability promotion. In Africa, Ghana's Mole National Park faced encroachment from local communities due to unclear land tenure and weak benefit-sharing mechanisms, undermining sustainability goals (Ansong & Pickering, 2021).

In South Africa, Kruger National Park has implemented community outreach and anti-poaching strategies, but issues of inequality and historical marginalization hinder the full realization of sustainability (Spenceley et al., 2019). In East Africa, the historical development of national parks was largely driven by colonial conservation policies, which often excluded indigenous communities from park lands. Kenya's Maasai Mara and Tanzania's Serengeti National Park are prime examples, where tourism-based conservation was prioritized over inclusive participation (Nelson et al., 2021). In Uganda, this historical exclusion has also shaped conservation approaches. National parks such as Queen Elizabeth National Park were gazetted without adequately addressing the displacement of local communities, particularly the Basongora and Bakonzo, which continues to influence the socio-ecological dynamics of sustainability (Kantono et al., 2022). Recent efforts to reverse this legacy through co-management, benefit-sharing, and human-wildlife conflict mitigation have shown mixed results due to limited funding, institutional gaps, and local resistance (UWA, 2023). Zooming into the local context, Queen Elizabeth National Park established in

1952 and covering over 1,978 square kilometers has historically been one of Uganda's flagship protected areas. However, decades of population growth, resettlement pressures, poaching, and encroachment have intensified stress on the park's ecological integrity (Wasswa et al., 2021). Strategies such as collaborative resource management, eco-tourism development, and conservation education have been employed to enhance sustainability. However, their implementation has faced challenges, including limited community ownership, corruption, political interference, and inadequate compensation for human-wildlife conflict (Kakembo & Doreen, 2023).

Statement of the Problem

National parks are essential wildlife sanctuaries, providing ecological, recreational, and educational benefits. Queen Elizabeth National Park has presented an agenda aimed at developing sustainability through environmental, economic and socio-cultural sustainability. Despite this, Queen Elizabeth National Park is faced with the environmental sustainability problems for example there is a challenge of resource dependency and Human-wildlife conflicts. Economic sustainability is also a turmoil as communities around the parks rely on tourism revenue with low sustainable requirements in reducing pollution, unsustainable tourism, illegal activities such as poaching and bush burning in the park has been on increase limiting the sustainability agenda in the park (Uganda Wildlife Authority, 2023). There is also a challenge of inadequate funding for conservation (Katswera et al., 2020). There exist social cultural sustainability constraints in the park, with the search for cultural attires, cultural and social activities around Queen Elizabeth National Park which have to some extent limited the prevalence and occurrence of the sustainable agenda. Balancing sustainability with the socio-economic needs of local communities presents significant challenges for the host communities. This context made the researchers to investigate the strategies and challenges faced in the promotion of sustainability of Queen Elizabeth National Park, Uganda.

Purpose of the Study

The purpose of the study was to assess the strategies and challenges faced in promoting sustainability in Queen Elizabeth National Park, Uganda.

Significance of the Study

This study will have significant implications for policy-making, conservation practices, and community engagement strategies. From a policy perspective, the insights gained will inform the development of frameworks that will integrate local community needs with conservation objectives, fostering sustainable park management. The findings will also contribute to theoretical knowledge by enhancing our understanding of the complex challenges and strategies developed to reduce or even curb these challenges. Furthermore, this study will pave the way for future research and innovations on conservation approaches and strategies ultimately contributing to the long-term sustainability of national parks in Uganda.

Methodology

Research Design

The researcher adopted a cross-sectional research design utilizing both quantitative and qualitative mixed methods to comprehensively investigate the multifaceted strategies employed by Queen Elizabeth National Park management to engage local communities towards conservation efforts and also identify key challenges faced.

Study Area

The study was carried out within QENP and the surrounding communities of Kasese, Rukungiri Kamwenge and Rubirizi.

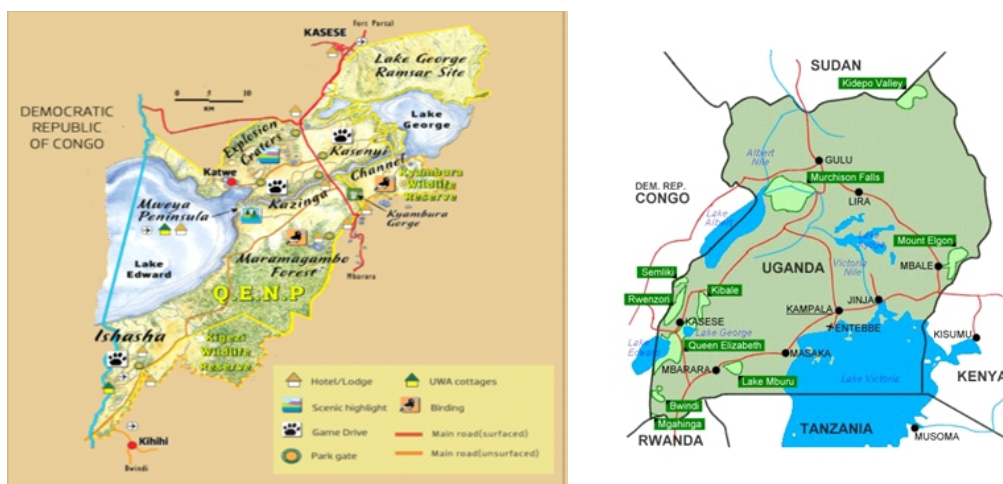


Figure 1: Map of Queen Elizabeth National Park and its location on the map of Uganda (Source: Uganda Tourism Board, 2022)

Study Population

There are approximately 1,727,576 residents living adjacent to and within Queen Elizabeth National Park and interact directly with park resources (UBOS, 2024). The study population included the communities, tour operators, local government officials and park management officials.

Sample Size and Sampling Procedure

Slovin's formula was used to determine the sample size of the population. i.e.

$$n = N/(1 + Ne^2)$$

Where;

n is the sample size

N is population size

e is the desired margin of error. The desired margin of error is 5%.
 Since the study population is 1,727,576, the sample size was calculated as 400 respondents.

Sampling Techniques

The researcher used simple random sampling to collect data from the questionnaire respondents whereas purposive sampling was used for interview respondents.

Table 1: Population Size, Sample Size, and Sampling Techniques

Quantitative Data			
District/Area	Population Size	Sample Size	Sampling Technique
Kasese	847,027	170	Simple random sampling
Rukungiri	375,974	75	Simple random sampling
Rubirizi	167,837	31	Simple random sampling
Kamwenge	336,738	64	Simple random sampling
Tour Operators	108	60	Simple random sampling
Total	1,727,576	400	
Qualitative Data			
Park officials	15	7	Purposive sampling
Local government officials	10	5	Purposive sampling
Total	25	12	

Source: Primary Data, 2025

Data Collection Methods

The researcher employed a well-structured questionnaire and interview method in the collection of primary data whereas government publications, magazines, and articles that were written by preceding scholars were used for secondary data.

Data Analysis Procedures

For Quantitative data, the researcher used SPSS Version 28 to compute frequencies, percentages and the mode whereas for qualitative data, it was analyzed thematically to explore key insights related to strategies employed by Queen Elizabeth National Park management to engage local communities towards conservation efforts and also identify key challenges faced.

Results

Strategies employed by Queen Elizabeth National Park management to engage local communities in conservation efforts

Responses showed that participatory management was prevalent amongst the 60.0% respondents, Community conservation education had 11.3% respondents, economic

incentives was prevailing amongst the 14.3% respondents, conflict mitigation strategies had 15.8% respondents, wildlife protection initiatives had 17.3% respondents, Sustainable resource use programs had 8.75% respondents, eco-tourism development had 12.5% respondents, other strategies had 3.8% respondents and finally the least (1.5%) were not aware of the conservation strategies employed by QENP management.

Interview findings generated from the field concerning, the strategies employed by QENP management towards sustainability.

The communities have been part of the wildlife protection initiatives executed in the provision of the wild life needs and protection, through this, control mechanisms to curb poaching activities are undertaken and executed together with the communities.

... .. Interview with Local Leaders, 02

There has been sustainable resource use programs such as usage of solar, gas and avoidance of usage of fossil fuels like charcoal that would lead to the reduction of the tree species which harbor the park species.

... .. Interview with Local Leaders, 04

Eco-tourism development has been emphasized and developed amongst the communities in and around Queen Elizabeth National Park.

... .. Interview with Local Leaders, 05

The communities have been taught about conservation efforts such as anti-poaching initiatives aimed at ensuring control mechanisms and the conservations are usually embraced by the communities.

..... Interview with Park Official, 06

Results generated from both questionnaire and interview show that there was some form of conservation strategies employed by Queen Elizabeth National Park management to engage local communities in conservation efforts, which are however being deployed at moderate and some at low levels which has affected the performance of the Queen Elizabeth National Park management.

Table 2: Conservation strategies employed by Queen Elizabeth National Park management to engage local communities in conservation efforts.

Response	Frequency	Percent
Participatory management	60	15.0
Community conservation education	45	11.25
Economic incentives	57	14.25
Conflict mitigation strategies	63	15.75
Wildlife protection initiatives	69	17.25
Sustainable resource use programs	35	8.75
Eco-tourism development	50	12.5
Others	15	3.75
None	6	1.5
Total	400	100

Source: Field Data, 2025

Challenges faced in promoting sustainability of Queen Elizabeth National Park

First it was affirmed that there is inadequate engagement of local communities regarding the sustainability of QENP, this had 13.0% respondents who strongly agree, 44.5% respondents agree, 4.0% respondents were neutral, 33.0% respondents disagree and 5.5% respondents strongly disagree. The findings in this case show that the mode response was Agree, meaning that high number of responses affirms that there is inadequate local community engagement regarding the sustainability of Queen Elizabeth National Park.

Secondly, on the aspect of “There is a challenge of resource dependency among local community leading to difficulties in promotion of sustainability in QENP”, 30.5% respondents strongly agree, 37.0% respondents agree, 18.0% respondents were neutral, 10.0% respondents disagree while 4.5% respondents strongly disagree. The mode response was Agree, indicating that most respondents recognized challenges related to resource dependency among local communities that hinder sustainability efforts in the park.

“There are policy and governance issues faced in the promotion of sustainability in QENP”, had 32.5% respondents who strongly agree, 30.5% respondents agree, 18.5% respondents were neutral, 12.0% respondents disagree while 6.5% respondents strongly disagree. The mode response was Strongly Agree, which reflects that a notable number of respondents believe that policy and governance issues have constrained the park's performance towards sustainability. The fourth challenge was “There is a challenge of limited funds in promotion of sustainability of QENP”, this had 33.5% respondents who strongly agree, 40.5% respondents agree, 12.0% respondents were not sure, 9.0% respondents disagree while 5.0% respondents strongly disagree. The mode response was Agree, suggesting that most respondents believe that limited funds significantly hinder sustainability initiatives in Queen Elizabeth National Park.

“There is a challenge of human wildlife conflicts faced during the promotion of sustainability”, this had 41.0% respondents who strongly agree, 34.0% respondents agree, 13.5% respondents were not sure, 9.5% respondents disagree while 2.0% respondents strongly disagree. The mode response was Strongly Agree, indicating that the majority of participants acknowledged the presence of human-wildlife conflicts as a key barrier to sustainability efforts.

The qualitative findings of the challenges faced in promoting sustainability within Queen Elizabeth National Park is provided through the responses from the interviews with the Park management and local leaders as presented below.

There is a challenge of limited funds in promotion of sustainability in QENP. This is because communities need finances to implement sustainable agenda projects such as tree planting, eco-tourism and these require finances from the park, which are quite limited or not included in the budgeting schedule of the park.

... .. Interview with Park Official, 02 & 05.

Truly, there is less engagement of local communities around Queen Elizabeth National Park regarding the importance of their engagement in the sustainable agenda.

... .. Interview with local leaders, 01.

There exists high level degree of dependence by communities on QENP especially for food, firewood, construction materials and fishing.

... .. Interview with local leaders, 04.

There is a challenge of human wildlife conflicts faced during the promotion of sustainability. The state of the human wildlife conflict with the local communities has frustrated the promotion of sustainability in Queen Elizabeth National Park.

... .. Interview with Park Official, 06.

Table 3: Challenges faced in promoting sustainability of Queen Elizabeth National Park

	SA		A		N		D		SD		Mode
	F	%	F	%	F	%	F	%	F	%	
There is inadequate engagement of local communities regarding the sustainability of QENP	52	13.0	178	44.5	16	4.0	132	33.0	22	5.5	178
There is a challenge of resource dependency among local community leading to difficulties in promotion of sustainability in QENP	122	30.5	148	37.0	72	18.0	40	10.0	18	4.5	148
There are policy and governance issues faced in the promotion of sustainability in QENP	130	32.5	122	30.5	74	18.5	48	12.0	26	6.5	130
There is a challenge of limited funds in promotion of sustainability of QENP	134	33.5	162	40.5	48	12.0	36	9.0	20	5.0	162
There is a challenge of human wildlife conflicts faced during the promotion of sustainability	164	41.0	136	34.0	54	13.5	38	9.5	8	2.0	164

Source: Field Data, 2025

Discussion of Findings

Strategies employed by Queen Elizabeth National Park management to engage local communities in conservation efforts

Participatory management, community conservation education, economic incentives, conflict mitigation strategies, wildlife protection initiatives, sustainable resource use programs and eco-tourism development were prevailing. The findings agree with those of Reed (2016) who argued that participatory management involves local communities in the management and decision-making processes of the park. This approach enhances their sense of ownership and responsibility towards conservation. Involving communities in decision-making ensures that their perspectives and needs are considered, leading to more effective and sustainable conservation outcomes. The findings agree with those of Jones (2017) who argued that empowering local communities to manage natural resources within or around national parks under legal frameworks is essential. The findings are in agreement with Harrison et al (2020) who contend that strategies to mitigate human-wildlife conflicts are crucial for reducing negative interactions and fostering coexistence. These strategies include the use of deterrents, compensation schemes for losses, and the creation of buffer zones between human settlements and wildlife habitats. The findings are in disagreement with

those of Su and Chen (2021) who in Wuyishan National Park in China, proposed a combined mechanism of community participation in park governance.

Challenges faced in promoting sustainability within Queen Elizabeth National Park

The findings showed that there is inadequate engagement of local communities regarding the sustainability, human wildlife conflicts, limited funds and finally there is resource dependency among local communities leading to difficulties in promoting sustainability of Queen Elizabeth National Park. The findings agree with those of Roe & Booker (2019) who argue that local communities often depend on natural resources from the park for their livelihoods, leading to overexploitation and environmental degradation. The findings agree with those of Bennett and Dearden (2016) who argued that effective community engagement is often hampered by a lack of trust between park authorities and local communities. The results agree with those of Ahebwa et al., (2018) who argued that inadequate policies, weak enforcement, and corruption can undermine conservation initiatives and lead to resource mismanagement. Strengthening policy frameworks and improving governance are essential for ensuring the long-term sustainability of national parks. The findings disagree with those of Zhang and Wang in (2024) who argued that perceptions of ecosystem services influence the environmentally responsible behavior (ERB) in national park communities, these hinder challenges to sustainability.

Conclusion

The purpose of the study was to assess the strategies and challenges faced in promoting sustainability in Queen Elizabeth National Park, Uganda. The findings showed that the National Park management do engage local communities in conservation efforts with participatory management as the most prevalent. The challenges faced in promoting sustainability were inadequate engagement, human wildlife conflicts, limited funds and resource dependency among local communities. The study concludes that inadequate engagement, limited funding and resource dependence are the major constraints, thus there is the need to enhance enforcement of environmental laws and policies. This can be done by increasing the capacity and coordination of park rangers, integrating technology like drone and camera surveillance, and working closely with local authorities to combat illegal activities.

From a policy perspective, the insights gained is expected to inform the development of frameworks that will integrate local community needs with conservation objectives, fostering sustainable park management. The findings have also contributed to theoretical knowledge by enhancing the understanding of the complexity of the challenges and various strategies developed to reduce or even curb these challenges. Furthermore, this study has paved the way for future research and innovations on conservation approaches and strategies ultimately contributing to the long-term sustainability of national parks in Uganda.

References

- Ahebwa, W. M., Aryampika, E., & Nyakaana, J. B. (2018). Local tourism value chain linkages as pro-poor tools for regional development in western Uganda, *Development Southern Africa*, 35(1), 1–14. <https://doi.org/10.1080/0376835X.2017.141444>
- Ansong, M., & Pickering, C. (2021). Managing conflicts in West African protected areas: A review of community-based approaches, *Conservation Science and Practice*, 3(1), e378.
- Bennett, N. J., & Dearden, P. (2016). From measuring outcomes to providing inputs: Governance, management, and local development for more effective marine protected areas, *Marine Policy*, 70, 1–7. <https://doi.org/10.1016/j.marpol.2016.05.019>
- DEFRA. (2020). *National Parks and sustainability strategy report*, UK Government.
- Harrison, R. D., Sreekar, R., Brodie, J. F., Brook, S., Luskin, M., O'Kelly, H., & Velho, N. (2020). Impacts of hunting on tropical forests in Southeast Asia, *Conservation Biology*, 30(5), 972–981.
- Jones, B. T. B. (2010). Community-based natural resource management in Namibia: Impacts, constraints and opportunities. *IIED*.
- Kakembo, J., & Doreen, A. (2023). Sustainability challenges in Uganda's protected areas: A case of Queen Elizabeth National Park, *Uganda Journal of Environmental Studies*, 5(2), 33–47.
- Kantono, R., Mugisha, A., & Turyahikayo, M. (2022). Conservation and community conflicts around Queen Elizabeth National Park, Uganda, *African Journal of Ecology*, 60(4), 754–764.
- Katswera, J., Mutekanga, N. M., & Twesigye, C. K. (2020). Biodiversity conservation and threat reduction in Kibale and Queen Elizabeth conservation areas, Uganda, *East African Journal of Biophysical and Computational Sciences*, 1(1), 1–22.
- Nelson, F., Lindsey, P., & Balme, G. (2021). Wildlife conservation and local communities in Africa *Biological Conservation*, 256, 109071.
- NPS (National Park Service). (2021). Adaptive Management in US Parks. *U.S. Department of the Interior*.
- Reed, M. S., De Vente, J., Stringer, L. C., Valente, S., & Newig, J. (2016). How does the context and design of participatory decision-making processes affect their outcomes? Evidence from sustainable land management in global drylands, *Ecology and Society*, 21(2), 24.

- Roe, D., & Booker, F. (2019). Engaging local communities in tackling illegal wildlife trade: Can a 'theory of change' help? *International Institute for Environment and Development*.
- Spenceley, A., Snyman, S., & Eagles, P. F. J. (2019). Guidelines for community involvement in tourism in protected areas, *Parks Journal*, 25(2), 57–68.
- Su, S., & Chen, Y. (2021). A study of the mechanism of community participation in resilient Governance of National Parks: With Wuyishan National Park as a Case. *Sustainability*, 13(18), 10090
- Uganda Wildlife Authority. (2023). Annual report 2022/2023, *Uganda Wildlife authority*, <https://ugandawildlife.org/wp-content/uploads/2024/05/UWA-annual-report-2022-2023-1>
- UN. (2019). Global Sustainable Development Report 2019: *The Future is Now*.
- UNEP. (2022). *Nature-based tourism in Asia: Lessons from Bhutan and Japan*, United Nations Environment Programme.
- UWA (Uganda Wildlife Authority) (2021). *Revenue sharing*, Retrieved from <https://www.ugandawildlife.org>.
- Wasswa, H., Kamukama, D., & Mugenyi, A. (2021). Ecological degradation and socio-economic dynamics in Queen Elizabeth National Park, *East African Journal of Environmental Research*, 3(1), 19–30.
- Zhang, Y., & Wang, L. (2024). An empirical study from residents of national park communities in China. *Land*, 13(1), 81. <https://doi.org/10.3390/land13010081>