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Original Article

Distributive Equity around Bwindi Impenetrable National Park in Uganda: Benefits, Accessibility, Perceptions, and Realities among Adjacent Communities

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Distributive equity in natural resource governance ensures the fair allocation of benefits and burdens among stakeholders, emphasising fairness for marginalised groups. Despite its critical role in natural resource management, persistent inequalities remain a significant challenge. This study investigated distributive equity around Bwindi Impenetrable National Park, Uganda, examining community perceptions, accessibility, and benefit distribution among residents of Kisoro, Rubanda, and Kanungu districts. The study used a mixed-methods approach, collecting both qualitative and quantitative data from 120 households and 30 key informants through interviews, workshops, questionnaires, and observations. Conducted between July and December 2024, the data were analysed using SPSS and NVivo, allowing a thorough assessment of benefit distribution and accessibility, especially for marginalised groups. Economic benefits were the most reported, primarily accessed through Uganda Wildlife Authority, tourism businesses, and NGOs. However, most respondents believed that some groups benefit more than others, highlighting widespread perceptions of inequality. The study identified governance shortcomings in benefit-sharing, stressing the need for transparency, inclusive participation, and accountability. It recommends an equitable governance framework that ensures inclusive decision-making and clear benefit-sharing mechanisms. These findings offer valuable insights for policymakers, conservation practitioners, and community leaders aiming to enhance benefit-sharing and promote sustainable conservation at Bwindi.

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INTRODUCTION

The fair allocation of resources, costs, and benefits is a cornerstone of socially just and sustainable conservation (Halpern et al., 2013; Vucetich et al., 2018; Armstrong, 2023). Globally, the discourse on distributive equity has become increasingly prominent as conservationists, policymakers, and local communities recognise the importance of fairness in the management of natural resources (Schreckenberg et al., 2016; Musavengane & Leonard, 2019; Gurney et al., 2021; Twinamatsiko et al., 2022). Distributive equity in natural resource governance means fairly allocating benefits and burdens among all stakeholders, especially marginalised groups. It focuses on who receives what and why, ensuring fairness in resource access, decision-making, and benefits from conservation like tourism and employment. Examples from South Africa, Latin America, and Nepal show efforts to achieve this equity (Cook, 2011; Monroy-Sais et al., 2016: Pant, 2016; Mdiniso, 2017; Maluleke, 2018).

Despite growing global interest, research on distributive equity around Uganda's national parks is limited. While benefit-sharing programs exist, few studies analyse how fairly benefits are distributed across social groups. This study fills that gap by empirically examining equity around Bwindi, providing crucial insights to inform policy, improve conservation legitimacy, and promote socially sustainable governance in Uganda. Specifically, the study intends to: 1) examine the benefits received by local communities around Bwindi Impenetrable National Park, 2) investigate

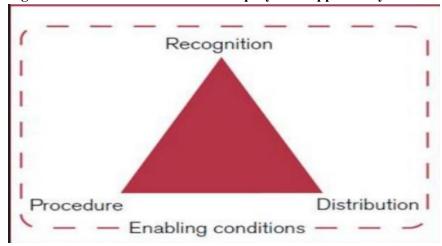
accessibility of the benefits, and 3) examine the perceptions and realities of fairness in benefit distribution among adjacent communities and how integration of equitable governance can solve the existing inequalities. This study places local analysis within a global context to explore how local realities align with or differ from international trends in achieving distributive equity in conservation.

CONCEPTUAL FRAMEWORK

In regions surrounding protected areas, such as Bwindi Impenetrable National Park in Uganda, equitable benefit-sharing is vital for fostering local support and ensuring long-term conservation et al., 2013; Franks success (Baker Twinamatsiko, 2017). However. the implementation of distributive equity often encounters obstacles, including socio-economic disparities, governance inefficiencies, and historical injustices (Parthasarathy, 2018). An equitable governance framework is central to achieving distributive equity in conservation areas. Equitable governance means ensuring fair sharing of conservation costs and benefits while including all stakeholders, especially marginalised groups. It involves three equity dimensions: distributive equity, which is fair allocation of benefits and burdens, procedural equity, meaning inclusive, transparent, and culturally sensitive decisionmaking with free, prior, and informed consent and recognition equity, which means respecting diverse knowledge, identities and challenging marginalisation. The framework stresses fair benefit

distribution, inclusive participation, transparency, and accountability (Schreckenberg et al., 2016; Law et al., 2018).

Figure 1: The Three Dimensions of Equity are Supported by a Framework of Enabling Conditions



Source: Adapted from McDermott et al. (2013) and Pascual et al. (2014)

Global experiences show that although benefitsharing mechanisms are common, their perceived fairness varies across social groups due to local governance, historical contexts, and unequal access to decision-making (Gurney et al., 2021; Morgera, 2024).

METHODS

Study Area

The study focused on communities around Bwindi Impenetrable National Park in southwestern Uganda, spanning Kisoro, Rubanda, and Kanungu districts. A UNESCO World Heritage Site, Bwindi covers 331 km² of dense forest and is globally recognised for its rich biodiversity, including half of the world's remaining mountain gorillas. The park also hosts numerous other primates, birds, and plant species. Surrounded by densely populated rural communities, some including marginalised groups like the Batwa Bwindi presents a complex setting where livelihoods and conservation intersect (Twinamatsiko, 2015). This made it a suitable site for exploring equity in benefit-sharing and natural resource governance.

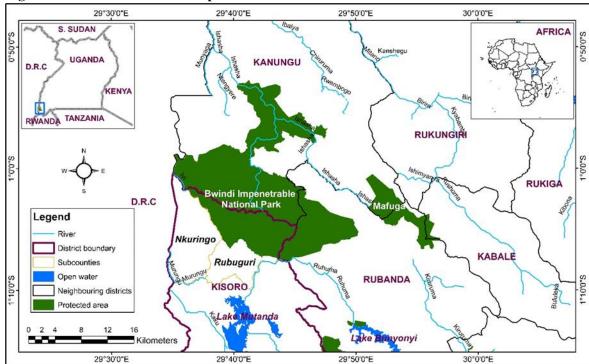


Figure 2: Location of Bwindi Impenetrable National Park

Source: Drawn by authors

Study Design

The study adopted a mixed-methods research design, combining qualitative and quantitative approaches to examine equitable governance in managing Bwindi Impenetrable National Park (Åkerblad et al., 2021). Qualitative methods explored perceptions of distributive equity, while a quantitative survey of 120 households collected standardised data, combining to provide a comprehensive understanding of benefit distribution around the park (Twinamatsiko, 2015; Tripathi et al., 2021)

Sampling Techniques

The study used purposive and systematic random sampling to select 120 respondents from communities around Bwindi Impenetrable National Park (Campbell et al., 2020). Participants were drawn from 15 parishes in Kisoro, Kanungu, and Rubanda districts that benefited from the Uganda Wildlife Authority's revenue-sharing program between 2021 and 2023. These include *Mushanje*,

Nyamabare, Nshanjare, Ihunga, Buhumuriro, Rubuguri, Remera. Karangara, Ruhimbwa. Rutugunda, Bushura, Muramba, Kiziba, Bugoro, and Ngaara (Figure 1). The 2021-2023 period was studied as the most recent complete cycle post-COVID-19, marking the program's reactivation. The sample size was determined using Yamane's (1967) formula, as recommended by Glenn (1992) and Adam (2021)(Bugabo et al., 2022). Based on a total population of 171 households identified during a pilot study conducted in the 15 selected parishes. A 95% confidence level and 5% margin of error were used to calculate the final sample size of 120 households.

$$n = \frac{n}{\left(1 + N\left(e\right)^2\right)}$$

Where n is the desired sample size, N is the total population size (171 households), and e is the level of precision. Following this, a simple random sampling procedure was used to select households for interviews.

A pilot study in Rubanda, Kanungu, and Kisoro districts identified households near Bwindi that benefit from revenue sharing, from which 120 respondents were selected using the sample size formula. Additionally, 30 key informants were purposively chosen, including local leaders -9, officials Ministry UWA -7, **NFA** representatives -3, ITFC staff -1. NGO representatives (BMCT) -2, district officials -3, political leaders -2, and Batwa community members -3.

Data Collection

The study employed various methods to collect both primary and secondary data, enabling triangulation for enhanced validity (Gibson, 2017). Primary data were collected between July and December 2024 through workshops, interviews, observation, and questionnaires, enabling broad stakeholder engagement and capturing seasonal dynamics. Secondary data came from literature on benefit-sharing fairness around Bwindi, including journal articles, books, reports, and other documented sources (Corti & Thompson, 2004).

Data Analysis

Data were analysed using SPSS v25 for both descriptive and inferential statistics to summarise respondent characteristics and identify patterns, with Chi-Square tests used to assess associations between variables like gender, age, and education across districts. NVivo v14 was used for qualitative data analysis, and results were presented in tables and figures with interpretations based on the statistical outputs.

RESULTS

Respondent Demographic Characteristics

The results reveal significant demographic and socio-economic differences among respondents from Kisoro, Rubanda, and Kanungu districts, including an average residency of over 46 years (p = 0.000) and gender disparities-77.5% male in Kisoro, 70% in Rubanda, and 60% in Kanungu (p = 0.000). These variations reflect deep-rooted place attachment and cultural norms that shape community engagement and conservation outcomes.

Age distribution differed across districts (p = 0.021), with Rubanda and Kanungu having more respondents in the 45-49 age group, while Kisoro had a more even spread across age categories. Age distribution patterns, with Rubanda and Kanungu skewed towards middle-aged groups, which suggests a more mature and potentially active demographic, whereas Kisoro's even spread reflects broader community involvement.

Educational attainment varied significantly across districts (p = 0.000), with Kanungu having the highest proportion of respondents with no formal education (40%) and Rubanda the highest with university education (10%). These disparities, shaped by socio-economic and historical factors like poor infrastructure, poverty, and displacement in Kanungu, versus better access and conservation-linked opportunities in Rubanda, affect community capacity to engage in governance, access information, and advocate for fair benefit-sharing around Bwindi.

Table 1: Respondent Characteristics from a Survey (mean±SD)

Variable	Kisoro (n = 40)	Rubanda (n = 40)	Kanungu (n = 40)	Kruskal- Wallis, test X ²	p
Time lived in	46.42±6.65	47.93±4.96	47.83±5.25	186.90	0.000
the area					
Categorical					
Gender	Male -77.5	Male -70	Male - 60	69.34	0.000
	Female - 22.5	Female -30	Female - 40		
Age of the	35-39 -17.5	35-39 - 7.5	35-39 - 5.0	12.86	0.021
respondent	40-44 -22.5	40-44 - 15.0	40-44 - 20.0		
•	45-49 -15.0	45-49 - 30.0	45-49 - 35.0		
	50-54 -20.0	50-54 - 25.0	50-54 - 17.5		
	55 and above -	55 and above - 22.5	55 and above -		
	25.0		22.5		
Level of	No formal	No formal education -	No formal	170.07	0.000
education	education - 30.8	35.0	education - 40.0		
	Primary - 28.3	Primary - 15.0	Primary -27.5		
	Secondary - 26.7	Secondary - 32.5	Secondary -20.0		
	Tertiary - 6.7	Tertiary - 7.5	Tertiary -10.0		
	University - 7.5	University - 10.0	University -2.5		

Types of Benefits Received from Bwindi Impenetrable National Park

Benefits from Bwindi

Table 1 shows that 100% of respondents around Bwindi prioritise economic benefits, which made up 40.5% of all responses, reflecting the community's reliance on tourism income and the tangible value of these gains for local livelihoods. As one key informant from Buhoma, Kanungu District noted during fieldwork in December 2024, "We benefit by selling handcrafted art to tourists, having the opportunity to directly book gorilla tracking permits, and being allocated land for constructing community lodges.". This illustrates the multifaceted ways in which tourism contributes to household income and local development.

Environmental benefits were recognised by 55% of respondents but often underreported due to limited awareness of less tangible ecosystem services. Fieldwork in Nyundo and Mpungu revealed frustration over restricted access to essential forest resources, highlighting tensions between conservation rules and local livelihood needs. A

male respondent from Mpungu, Kanungu District, expressed this frustration, stating: "We, the people of Mpungu, are not allowed to harvest resources from Bwindi for our survival, yet they claim that we have rights to the park" (December 3, 2024).

Marginalised groups like the Batwa felt disconnected from cultural and heritage benefits, with only 50.8% recognition, due to displacement and limited involvement in cultural tourism, deeply affecting their sense of ownership and connection to the forest. Their displacement during conservation efforts disrupted traditional practices and weakened their connection to the land. As a result, many Batwa feel disconnected from the very cultural and heritage benefits that others attribute to the park. Their limited involvement in cultural tourism initiatives further diminishes their sense of ownership and participation, highlighting inequities in the distribution of cultural benefits from conservation.

Social benefits such as infrastructure and education were the least reported (40.8%) because many see them as government duties, not linked to

conservation or tourism revenue. During a key informant interview conducted in Muramba, Kanungu District (December 2024), a female respondent stated: "While it is true that some schools and hospitals have been constructed due to tourism from Bwindi, we cannot consider this as a benefit because it is the government's responsibility to provide education and healthcare services, even

in areas that do not border parks or receive revenue. What we need are direct benefits." There is a disconnect between conservation investments and community perceptions, with social benefits underreported due to unclear links, emphasis on tangible gains, and exclusion of vulnerable groups, revealing disparities in access and understanding.

Table 1: Benefits from Bwindi

Benefits	Responses		Percent of Cases	
	N	Percent	-	
Economic Benefits	120	40.5%	100.0%	
Social Benefits	49	16.6%	40.8%	
Environmental Benefits	66	22.3%	55.0%	
Cultural and Heritage Benefits	61	20.6%	50.8%	
Total	296	100.0%	246.7%	

Accessibility of the Benefits from Bwindi

Figure 2 shows that 81.5% of community members access benefits from Bwindi through recruitment by UWA, private tourism businesses, and NGOs. However, field evidence reveals these benefits are often inequitably distributed, frequently excluding marginalised groups. A Mutwa man shared: "Those who are educated and can afford to bribe the leaders in revenue-sharing committees are the ones who receive the majority of the benefits, while most of us are left out, despite living near the park and suffering the most from wildlife crop raids originating from Bwindi.". This reveals systemic barriers that hinder equitable access to conservation benefits and emphasises the urgent need for more transparent and inclusive benefit-sharing mechanisms.

Revenue-sharing schemes, recognised by 47.9% of respondents, aim to distribute 20% of Bwindi's annual revenue to nearby communities to promote conservation support. During an interview conducted in Nkuringo, Kisoro District (December 2024), a female key informant shared:

"We appreciate UWA for providing us with revenue-sharing funds, but our leaders often mismanage these funds, using them for their personal interests without involving us as community members. They even dictate which projects we should invest in, ignoring our preferences as local residents."

This highlights a disconnect between policy objectives and actual implementation, emphasising the need for more inclusive and accountable governance in revenue-sharing programs.

Running tourism businesses is a significant way through which local communities around Bwindi access benefits, with 52.1% of respondents indicating engagement in such activities. Field observations revealed that many residents operate small-scale tourism enterprises, including craft shops, cultural dance groups, and guided nature walks. Nearly half (49.6%) of respondents around Bwindi access economic benefits by joining cooperatives, highlighting the vital role of self-employment and collective community initiatives in local development, as supported by field interviews

Revenue sharing through local governmentapproved channels is a notable way communities around Bwindi access benefits, with 47.9% of respondents indicating receipt of funds through

official mechanisms. Although formal channels aim to ensure transparency, field findings reveal issues like delays, mismanagement, and limited community involvement. In Rubanda and Kisoro, projects like a maize mill and tourism centre were rejected or underused due to misalignment with local priorities, underscoring how top-down approaches hinder participation and impact, and highlighting the need for inclusive, community-driven conservation.

Communities near Bwindi frequently experience wildlife raids that damage crops and intensify human-wildlife conflict. In response, the Uganda Wildlife Authority introduced a compensation policy aimed at offering financial redress, reducing local resentment, and strengthening community support for conservation. Field findings show that 34.5% of respondents reported receiving compensation, which helped offset financial losses

and foster more positive attitudes toward wildlife protection.

Cultural tourism, NGO aid, and conservation projects make up only 31.1% of local benefit distribution, indicating they play a minor role in supporting livelihoods. Field evidence indicates that cultural tourism provides supplementary income through traditional dances, crafts, and storytelling. Conservation projects often provide limited direct benefits to communities, prioritising wildlife protection with most funds allocated to park management, ranger salaries, and anti-poaching efforts. During an interview we conducted in Rubanda, a respondent man remarked, "Everyone who comes with funding focuses on conserving mountain gorillas, neglecting our needs, even though we have lost so much in the name of conservation. We require special attention.". Nyamabare Rubanda in December 2024.

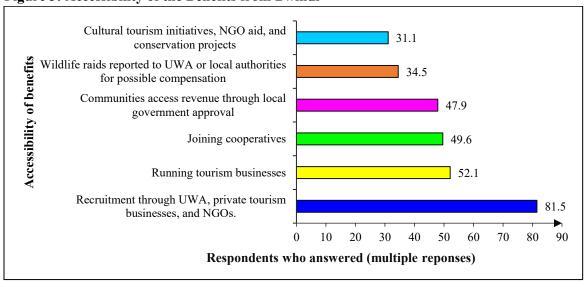


Figure 3: Accessibility of the Benefits from Bwindi

Perceptions on Fairness in the Distribution of Benefits

Table 2 below shows that 79.7% of respondents perceive unequal benefit distribution from Bwindi, believing some communities and individuals gain more than others. This concern aligns with findings from numerous studies conducted in other parts of the world, which similarly highlight unequal access

to park-related opportunities. In Bwindi, 42.4% of respondents believe that wealthier and more educated individuals have greater access to benefits. This perception highlights underlying socioeconomic disparities in resource allocation and reflects broader global trends of unequal distribution in conservation-related gains.

More than half of the respondents (53.4%) pointed out that displaced and vulnerable groups, such as the Batwa, often receive less compensation or support, highlighting significant gaps in addressing the needs of the most marginalised. Fieldwork evidence confirms that these groups are particularly at risk of exclusion. As one female respondent from Rubuguri, Kisoro, noted in December 2024: "We, the Batwa, have always been left behind in most matters. We are not even allowed to be elected as leaders, and as a result, we miss out on many benefits, for example, revenue sharing."

50% of respondents cited corruption and political interference as major obstacles to fair benefit distribution in Bwindi. These challenges undermine transparency and reinforce exclusion, highlighting the urgent need for more inclusive and accountable governance structures. As one male respondent from Mushanje, Rubanda, stated in December 2024: "Those with money to bribe the leaders and those who have connections in the benefit distribution committees are the ones who receive most of the benefits."

Table 2: How Fair is the Distribution of Benefits

Reasons	Responses		Percent of Cases
	N	Percent	
Some communities and individuals	94	35.3%	79.7%
benefit more than others.			
Wealthier and more educated people	50	18.8%	42.4%
often have more access to opportunities.			
Displaced and vulnerable groups often	63	23.7%	53.4%
receive less compensation or benefits.			
Corruption and political interference	59	22.2%	50.0%
affect fair allocation of resources			
Total	266	100.0%	225.4%

DISCUSSION

Benefits Received from Bwindi Impenetrable National Park

The prominence of economic benefits as reported under 3.2.1(page 9) shows the central role of Bwindi in supporting local livelihoods through tourism-related employment, the sale of crafts and agricultural products, and trade. This aligns with broader East African findings that link protected areas to improved community welfare through revenue-sharing and conservation-related income (Imanishimwe, 2022; Kegamba, 2024). However, despite these positive perceptions, deeper issues persist in benefit distribution, power dynamics, and conservation justice, particularly for marginalised groups such as the Batwa, who continue to face structural exclusion.

Section 3.2 (page 13) highlights ongoing exclusion of displaced and vulnerable groups, especially the

Batwa, who face limited land rights, participation, and transparency in benefit-sharing (Mukasa, 2014; Saulo, 2022). Revenue-sharing programs in areas like Buhoma and Ruhija are seen as top-down and elite-driven, offering little benefit to poorer households due to limited consultation and (Ampumuza, 2021). transparency Limited consultation and transparency have increased inequalities, while reliance on tourism makes Bwindi's conservation economically vulnerable and neglects cultural and governance values, underscoring the need for fair benefit-sharing, community empowerment, and diverse strategies (Gounder & Cox, 2022).

Respondents acknowledged environmental benefits from Bwindi Impenetrable National Park, but this reflects surface-level awareness influenced by messaging, with tensions arising as communities prioritise immediate needs over intangible

ecosystem benefits (Bitariho, 2013). Research conducted elsewhere confirms our findings. In Tanzania's Amani Nature Reserve, villagers recognised the forest's impact on rainfall but were sceptical of conservation goals that limited traditional farming (Chamshama & Vyamana, 2010; Piekkola, 2013). Conservation support at Bwindi depends not just on awareness but on addressing structural inequalities and livelihood challenges through fair benefits and compensation.

Respondents acknowledge Bwindi's benefits, but the exclusion of displaced indigenous groups like the Batwa is overlooked, with programs like the Batwa Forest Experience seen as externally driven and superficial rather than truly empowering (Kagumba, 2021). The Batwa Forest Experience showcases Batwa culture through scripted tourist performances, but many Batwa have little control, earn minimal income, and are excluded from revenue decisions, risking cultural commodification without addressing their historical injustices or poverty (Mukasa, 2014). Cultural recognition in conservation is often superficial and lacks genuine community ownership and fair benefits, risking protected areas like Bwindi becoming symbolic rather than effective without prioritising indigenous rights and participation.

Respondents recognised social benefits from Bwindi, but low reporting reflects unclear links to conservation, visibility issues, and historical distrust caused by displacement and perceived injustices (Kabra, 2018). In Uganda's Queen Elizabeth National Park, local communities failed to recognise investments in schools and health facilities due to poor communication and mistrust of park authorities (Nuwabine, 2017). In Ghana's Kakum National Park, although social infrastructure was introduced, it was viewed as externally imposed and lacking community ownership (Amoah & Wiafe, 2012). Social benefits rely on transparent, fair, and inclusive sharing; Bwindi's low recognition calls for improved community engagement, clearer benefit attribution, and trust-building for equity.

Accessibility of the Benefits from Bwindi

The study identified the main avenues through which local communities access benefits from Bwindi; however, field evidence indicates that these benefits are unevenly distributed and frequently do not reach the most marginalised groups. Research shows that employment opportunities from UWA and private tourism enterprises often favour individuals with higher education or better connections, excluding poorer or less-educated community members (Katongole, 2025). NGOs like BMCT face criticism for externally driven projects that misalign with local needs, leading to limited community engagement and ownership (Wieland & Bitariho, 2013). Unequal benefit-sharing at Bwindi transparency, requires empowerment marginalised groups, support for community projects, and increased local participation for sustainable conservation

Revenue-sharing schemes are identified as one of the key avenues through which local communities receive benefits from Bwindi. Field findings reveal governance and transparency issues, with local officials managing funds without community input, leading to perceived mismanagement. The Batwa feel marginalised by displacement, unequal tourism benefits, and few job opportunities, deepening their struggles and undermining conservation legitimacy (Schulze, 2022). The 1991 eviction of the Batwa from Bwindi caused poverty and exclusion; despite some support, systemic inequities remain, highlighting the need for inclusive governance and transparent benefit-sharing.

Tourism businesses are a key source of benefits for communities around Bwindi, with initiatives like the Buhoma-Mukono Community Development Association and cooperatives such as Ride 4 a Woman offering employment and income through cultural tours, craft sales, and hospitality services. (Manyisa Ahebwa & van der Duim, 2013). Tourism

benefits are unevenly distributed, favouring those with capital, skills, or prime locations, while poorer families are left behind; external investors dominate profitable ventures, leaving locals in low-income roles (Mugerwa, 2018; Saulo, 2022). These challenges show the need for capacity-building, affordable financing, and market diversification to promote more equitable community participation in tourism.

In Bwindi, people join cooperatives as a vital source economic benefits. Cooperatives individuals to engage in tourism-related activities like guiding, handicrafts, and hospitality, ensuring local communities receive a fair share of tourism revenue (Matetskaya et al., 2019). Agricultural cooperatives also improve access to markets, better prices, and essential resources, empowering farmers to increase productivity (Shiferaw et al., 2011). Cooperatives boost self-employment like artisan work by providing shared resources, marketing, and collective selling opportunities (Menichinelli et al., 2017). Strengthening cooperatives in Bwindi promotes sustainable development and conservation by enhancing management, market access, inclusivity, income diversification, financial access, training, and policies.

Though local government-approved revenuesharing schemes aim for transparency and accountability, research shows they face challenges like weak institutions, mismanagement, corruption, and elite capture. Local governments often lack the funds and capacity to implement these programs effectively, causing inefficiencies. (Mansuri & Rao, 2012). Despite oversight, corruption and political interference still occur, hindering funds from reaching the intended communities and being used for their intended purposes (Jacobs, 2019). Local sometimes governments favour politically influential groups, causing unequal development and excluding communities from decision-making on revenue and projects (Shackleton et al., 2002; Mansuri & Rao, 2012). Lack of community

engagement in project planning leads to misaligned priorities and local resistance.

The Uganda Wildlife Authority's compensation scheme (page 12) supports communities near Bwindi affected by crop damage and human-wildlife conflict, but its effectiveness is hindered by delayed payments, undervalued claims, and verification challenges. (Franks & Twinamatsiko, 2017). Moreover, research indicates that benefit schemes fail to address deeper issues like habitat encroachment and poor land use, with critics warning that overreliance on compensation can foster dependency and hinder sustainable solutions (Akampurira & Bitariho, 2018). Thus, while helpful short-term, compensation should be part of broader strategies tackling the root causes of human-wildlife conflict around Bwindi.

Cultural tourism initiatives, NGO aid, and conservation projects also support local community livelihoods around areas like Bwindi. The Batwa's cultural tourism around Bwindi faces limited impact due to low tourist numbers, poor marketing, and weak institutional support, resulting in under promotion of their performances and guided walks and thus limited income (Schulze, 2022). Similarly, NGO aid, though intended to support conservation and community development, are sporadic, projectbased, or short-term, failing to provide sustainable benefits (Berghöfer et al., 2017). NGOs like the International Gorilla Conservation Programme (IGCP) support local communities through training and small grants, but their aid often targets specific groups, leaving many without access (Prickett, 2019).

Cultural tourism, NGO aid, and conservation projects, though limited in reach, significantly impact by preserving local heritage, providing educational experiences, and strengthening community identity (Shikuku, 2019). NGO and conservation projects provide long-term skills, environmental education, jobs, and support for agriculture and water through improved ecosystem services (O'Connell et al., 2019). Therefore, while

these avenues are accessed by fewer people, their indirect benefits and long-term contributions to sustainability should not be underestimated in the conservation of Bwindi.

Perceptions on Fairness in the Distribution of Benefits

Research shows Bwindi's conservation benefits favour local elites, reinforcing inequalities, a global trend where revenue-sharing often benefits well-connected individuals while excluding marginalised groups, as seen in Bolivia's Madidi National Park (Høyme, 2016). In the Philippines' Northern Sierra Madre Natural Park, better-educated individuals with NGO ties had greater access to jobs and decision-making, while less educated locals faced barriers to participation (Minter et al., 2014). These examples highlight a global trend where conservation without deliberate equity measures like inclusive participation and transparent benefit-sharing often reinforces social inequalities rather than resolving them.

In Bwindi, respondents indicated that wealthier and more educated individuals tend to have greater access to conservation-related benefits. However, such outcomes are not inevitable. Evidence from governance reforms, such Namibia's as Community-Based Natural Resource Management (CBNRM) program, shows that structured and transparent benefit-sharing mechanisms can build trust, empower local communities, and enhance conservation outcomes. (Mosimane & Silva, 2015; Beal, 2019;). In Bhutan, pro-poor tourism strategies prioritised training and support for low-income and less educated community members (Kanel, 2024).

Evidence from fieldwork presented indicates that displaced and vulnerable groups are particularly at risk of exclusion in Bwindi. This challenge is not unique to Uganda; similar patterns are observed globally. For example, in Ethiopia's Bale Mountains National Park, pastoralist communities were excluded from decision-making processes and received minimal compensation, leading to

widespread resentment and undermining conservation efforts (Lone, 2023). Similar issues were observed among the Quilombola communities in Brazil's Atlantic Forest (Lone, 2023). In Bwindi, the Batwa indigenous people, displaced during the park's establishment, remain marginalised despite compensatory efforts (Saulo, 2022).

Corruption and political interference hinder fair benefit distribution as seen in the findings, but Namibia's CBNRM program combats these through legal frameworks, public audits, and transparent revenue disclosures. (Meyer, 2015). Kenya's NRT improves accountability through digital monitoring, audits, and participatory boards, while Nepal's Chitwan Park reduces elite capture by involving communities in revenue planning and budgeting (Galvin et al., 2021; Dongol, 2018). Equitable emphasising governance, transparency, participation, accountability, and inclusion, can improve fair benefit-sharing at Bwindi, as demonstrated by successful models in Namibia, Nepal, and Kenya.

Integrating Equitable Governance

Half of the respondents highlighted corruption and political interference as major barriers to fair benefit distribution, causing elite capture and marginalisation; improving transparency with documented benefits, public disclosures, and independent audits can foster accountability and inclusivity (Santarlacci et al., 2024). Publishing benefit-sharing reports and holding open meetings, as seen in Namibia's CBNRM program, help reduce secrecy and corruption through transparent financial reporting (Stamm, 2017).

Over half of respondents believe vulnerable groups like the Batwa receive less compensation, while less than half see wealthier, educated individuals benefiting more, highlighting the need for inclusive decision-making to enhance equity (Achan-Okitia, 2015). For instance, adopting participatory governance like in Canada's Gwaii Haanas National Park, where Indigenous First Nations are co-

managers, can ensure that excluded groups have a voice in benefit-sharing (Hauser, 2016).

Weak accountability allows corruption and elite capture, but monitoring and grievance mechanisms can help prevent and address these issues (Harrison & Wielga, 2023). Examples include Kenya's Northern Rangelands Trust (NRT), which uses digital monitoring, independent audits, and governance boards to maintain accountability (Galvin et al., 2021). In Bwindi, community grievance redress mechanisms and independent audits of revenue-sharing funds can prevent abuse.

The research found marginalised groups like the Batwa are underrepresented in leadership, causing benefit exclusion. Promoting diverse representation, including women and youth, can improve equity in benefit-sharing (Morgera, 2023). Like Nepal's Chitwan National Park, adopting equitable governance at Bwindi can promote transparency, inclusive decision-making, and fair representation, helping to reduce inequalities, build trust, and support sustainable conservation. (Dongol, 2018).

CONCLUSION

Findings from this study indicate that while Bwindi Impenetrable National Park provides economic, environmental, cultural, and social benefits to surrounding communities, these benefits are widely perceived as inequitably distributed. Perceived unfairness in conservation at Bwindi stems from real disparities in wealth, education, displacement, and political power, with marginalised groups like the Batwa excluded, while corruption and political interference undermine trust in governance. Achieving distributive equity at Bwindi requires inclusive, and context-sensitive transparent. benefit-sharing that empowers communities, recognises rights, and supports vulnerable groups through an equitable governance framework.

Recommendations

To address the observed gaps in transparency, elite capture, and exclusion of marginalised groups like the Batwa in benefit-sharing schemes around Bwindi Impenetrable National Park, authorities should implement equitable governance structures with clear, transparent mechanisms, inclusive participation, and independent oversight.

The implementation of targeted support programs for the Batwa and other displaced and vulnerable groups around Bwindi Impenetrable National Park, alongside the establishment of anti-corruption measures, directly addresses the identified gap of their marginalisation and the urgent need for inclusive economic initiatives aimed at empowering these community members.

Ensuring legal recognition and cultural protection of Indigenous rights, alongside public outreach on conservation benefits, addresses Batwa marginalisation and promotes shared responsibility for sustainable resource management.

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