Journal of African Interdisciplinary Studies (JAIS): **ISSN 2523-6725** (online)
August 2025 Vol. 9, No. 8
Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya

By

Muendo Nicholas Mwongela[1], Dr. I. O. Mahiri[2] & D. A. Osebe[2]

[1]Department of Geography, Kenyatta University, Nairobi, Kenya.
[2]Department of Geography, Kenyatta University, Nairobi, Kenya.

Abstract
The global shift towards participatory conservation assumes that meaningful community involvement enhances the management and sustainability of protected areas (PAs). However, the success of such initiatives is often constrained by the complex socio-economic contexts of adjacent local communities. This study investigates these determinants at Chyulu National Park (CNP), Kenya, establishing a critical link between community characteristics, their engagement in formal participatory structures, and their actual, measured patterns of resource extraction. Employing a convergent parallel mixed-methods design, the research surveyed 210 households using structured questionnaires and integrated this quantitative data with qualitative insights from in-depth interviews and direct, systematic observation of resource use along a 30 km stretch of the park boundary. The findings reveal a critical and deeply rooted paradox. While key socio-economic indicators such as household income and level of education showed no statistically significant relationship with formal participation in conservation programs like Resource Access Agreements, these same factors were identified as the primary drivers of informal and often illegal resource use. High levels of poverty and dependence on subsistence agriculture directly correlated with significant extraction of fuelwood, construction poles, and grazing resources from the park. Furthermore, the patterns of resource extraction were found to be socially differentiated, with gender significantly influencing the types of resources collected, reflecting traditional divisions of labor. The study concludes that formal participatory structures are rendered largely ineffective when they fail to provide tangible, household-level economic benefits that address the root causes of resource dependency. For conservation to be sustainable, management strategies must urgently move beyond tokenistic forms of participation and create direct livelihood incentives that transform communities from mere stakeholders into genuine partners in protecting PAs. Consequently, conservation policies must be socially nuanced, recognizing and responding to the fact that different segments of the community interact with, and depend upon, the park in fundamentally different ways.

Keywords: Protected Areas, Public Participation, Socio-Economic Characteristics, Community-Based Conservation, Chyulu National Park, Livelihood Diversification, Resource Dependency

Journal of African Interdisciplinary Studies (JAIS): **ISSN 2523-6725** (online)
August 2025 Vol. 9, No. 8
Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya

By

Muendo Nicholas Mwongela[1], Dr. I. O. Mahiri[2] & D. A. Osebe[2]

1. Introduction

For over a century, the dominant global paradigm for biodiversity conservation has been the "fortress conservation" model. This approach, rooted in a preservationist ethic that seeks to separate nature from human influence, establishes protected areas (PAs) through the creation of strict, often militarized, boundaries and the systematic exclusion of local and indigenous communities (Brockington, 2002). This top-down, state-centric model, epitomized by the creation of Yellowstone National Park in the United States in 1872, has a deeply problematic legacy. Its implementation frequently resulted in the forced displacement of indigenous populations from their ancestral lands, the criminalization of traditional livelihood practices, the restriction of access to vital natural resources, and the generation of deep-seated hostility and violent conservation conflicts between park managers and marginalized local people (Adams & Hutton, 2007; Redpath et al., 2015). This exclusionary history is particularly poignant and relevant in post-colonial nations like Kenya, where the colonial government gazetted a vast network of national parks and reserves with little to no regard for the communities who had stewarded and depended upon those lands for generations (Mwongela, 2015). The legacy of this approach is a persistent and often justified mistrust of conservation authorities among many rural communities.

In recent decades, however, a significant paradigm shift has occurred, moving towards a more inclusive and people-centered approach known as participatory conservation, or more broadly, Community-Based Conservation (CBC). The core premise of this new paradigm is a direct response to the failures of the fortress model. It posits that conservation outcomes are more likely to be effective, equitable, and sustainable when local communities who live alongside and are most impacted by conservation efforts are actively involved in the governance of PAs and, crucially, when they derive direct and tangible benefits from their conservation (Bennett et al., 2017; Western, 2001). This approach seeks to transform the relationship between parks and people from one of conflict to one of collaboration, aligning the goals of biodiversity protection with the goals of local socio-economic development.

However, the transition to and implementation of these participatory models is not a panacea, and their effectiveness is by no means guaranteed. A vast and growing body of research demonstrates that the success of community involvement is deeply and inextricably intertwined with the underlying socio-economic context of the participating communities. A complex web of factors—including household income levels, educational attainment, land tenure security, household size, and the intricate social structures of a community—can significantly influence a community's ability, willingness, and capacity to participate meaningfully in conservation efforts (Gatiso et al., 2022). High levels of poverty, for example, can create a "poverty trap" where the immediate, desperate need for natural resources for survival overrides any long-term conservation incentives. It is therefore of paramount importance to understand how these socio-economic determinants shape the nature and extent of community participation, as this understanding is critical for designing effective and equitable conservation policies. This article, drawing from a comprehensive mixed-methods study of communities bordering the Chyulu National Park (CNP) in Kenya,

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

seeks to contribute to this understanding by systematically assessing how these specific socio-economic characteristics determine the nature, form, and intensity of public participation in the management of a vital protected area.

Statement of the Problem

Despite a global paradigm shift towards Community-Based Conservation (CBC), the management of protected areas like Chyulu National Park (CNP) in Kenya continues to face significant challenges from unsustainable resource extraction by adjacent communities. The core assumption of participatory models is that local involvement will lead to better conservation outcomes. However, there is a critical disconnect between the formal participatory structures, such as Resource Access Agreements (RAAs), and the actual on-the-ground behavior of resource users.

The problem this study addresses is the lack of a clear, empirically-grounded understanding of how the specific socio-economic characteristics of local communities in the CNP area influence their engagement with the park. While poverty is anecdotally linked to illegal resource use, the precise relationship between variables like income, education, and gender, and their dual impact on both formal participation (in RAAs) and informal behavior (illegal extraction), remains unquantified and poorly understood in this specific context.

This knowledge gap is a significant impediment to effective conservation management. Without a data-driven understanding of the root causes of resource dependency, conservation policies implemented by bodies like the Kenya Wildlife Service risk being ineffective. They may focus on creating participatory forums that fail to attract the most resource-dependent community members, while not addressing the underlying economic desperation that drives the very activities threatening the park's integrity. This study, therefore, seeks to fill this gap by systematically investigating these relationships to provide evidence-based insights for designing more effective and equitable conservation strategies.

2. Literature Review

The theoretical and conceptual framework for participatory conservation is built upon the fundamental idea that when local communities have a tangible stake and a sense of ownership over natural resources, they are more motivated and better equipped to manage them sustainably (Ostrom, 1990). The CBC model advocates for an integrated approach to conservation and development, one that seeks to move communities from their historical position as passive, often victimized, subjects of conservation policy to that of active social actors and empowered partners in the decision-making process (Mwongela, 2015). This shift involves the devolution of certain rights and responsibilities to the local level, fostering co-management arrangements where communities and state agencies share the tasks of governance. In the Kenyan context, this is often implemented through formal mechanisms such as Resource Access Agreements (RAAs). These are negotiated contracts between the Kenya Wildlife Service (KWS) and adjacent communities, which grant community members limited and regulated access to specific park resources (such as medicinal plants, thatch grass, or water) in return for their active assistance in protection, monitoring, and anti-poaching activities. The underlying logic is that this quid pro quo will create a positive feedback loop, where benefits foster participation, and participation leads to better conservation outcomes.

However, a vast body of empirical studies from across Africa and the globe demonstrates the profound complexities and challenges of implementing this approach in practice. A major meta-analysis of community forest management projects worldwide

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

conducted by Oldekop et al. (2016) found that while community participation can, under the right conditions, lead to simultaneous improvements in local livelihoods and forest conditions (a "win-win" scenario), the outcomes are highly variable, context-dependent, and often fall short of their intended goals. The success of these initiatives is contingent on a wide range of factors, including the clarity of property rights, the strength of local institutions, the degree of genuine power devolved to the community, and the nature and scale of the benefits provided.

A growing body of research has specifically focused on identifying the household-level socio-economic determinants that influence an individual's or a household's decision to participate in conservation programs. A study in Ethiopia by Gatiso et al. (2022), for example, found that household income, level of education, and the physical distance of the household from the forest were all significant determinants of a household's decision to participate in a participatory forest management program. Interestingly, they found that households with moderate incomes were more likely to participate than the very poorest (who were too preoccupied with immediate survival) and the wealthiest (who had less need for the forest resources). This highlights the important fact that communities are not monolithic entities, and different socio-economic strata may have vastly different incentives and capacities to engage.

Research in Tanzania by Kajembe and Kessy (2000) found that the perceived fairness and transparency of benefit-sharing mechanisms were critical. When community members felt that the benefits from conservation were being captured by local elites or were not being distributed equitably, their willingness to participate and to comply with conservation rules was significantly eroded. This underscores the importance of good governance and social equity within the participatory process itself.

In Kenya, the literature on benefit-sharing and community participation around protected areas paints a similarly complex picture. A study by Wekesa et al. (2021) in the Amboseli ecosystem found that while benefit-sharing programs existed, they were often perceived by the community as being inadequate and failing to genuinely offset the significant economic costs of living with wildlife, such as crop-raiding and livestock predation. As a result, these programs did little to change local attitudes or behaviors towards conservation. This points to a critical challenge: the "benefits" offered through participatory schemes must be substantial enough to outweigh the "costs" of conservation as experienced by the local community.

Despite this rich and growing body of literature, a significant empirical and methodological gap remains. Many studies, particularly in the Kenyan context, tend to focus on community attitudes, perceptions, and self-reported behaviors without systematically linking them to measured, on-the-ground patterns of resource extraction. There is often a disconnect between what people say in surveys and what they actually do. Furthermore, few studies have systematically analyzed how different socio-economic segments *within* the same community engage differently with both formal conservation initiatives and informal (often illegal) resource use. The research conducted at Chyulu National Park was designed to explicitly address this gap. It aimed to move beyond perceptions to reality by directly and simultaneously linking the detailed socio-economic profile of adjacent communities to: (a) their level of participation in formal management structures like RAAs, and (b) their observed and quantified patterns of resource extraction along the park boundary. This dual focus allows for a more robust and nuanced understanding of the complex relationship between poverty, participation, and environmental behavior.

Journal of African Interdisciplinary Studies (JAIS): ISSN 2523-6725 (online)
August 2025 Vol. 9, No. 8
Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

3. Methodology

3.1 Study Area

The research was conducted at the South-Eastern edge of Chyulu National Park (CNP), located in Makueni County, Kenya. The park, which was gazetted in 1983 and covers an area of approximately 741 square kilometers, is a range of volcanic hills of geologically recent origin. It forms a critical water catchment area, serving as a vital "water tower" for the surrounding plains, including the Tsavo ecosystem and the Mzima Springs. However, the park has a long and contentious history of conflict with local communities, including violent evictions of squatters in its early years, which has fostered a legacy of mistrust.

The area bordering the park is inhabited by two main ethnic groups: the Akamba community, who are predominantly agro-pastoralists practicing subsistence farming of crops like maize and beans, and the nomadic Maasai pastoralists, who utilize the area for seasonal grazing. This creates a complex social dynamic and competing demands on the park's resources. For the purpose of this study, four villages that are located directly adjacent to the park boundary—Mbukoni, Bondeni, Mbotela, and Kiembeni—were purposively selected. These villages were chosen because their proximity to the park means they have the most direct and intense interaction with its resources, making them ideal sites for investigating the dynamics of participation and resource extraction (Mwongela, 2015).

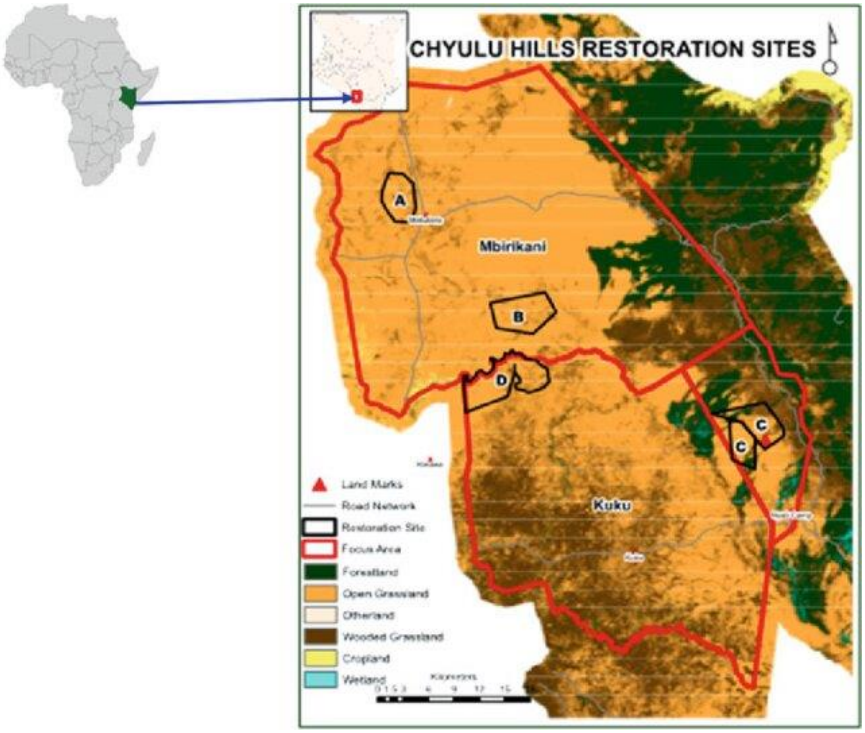

Figure 3.1 : A map showing the location of Chyulu National Park within Kenya

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

3.2 Sampling and Data Collection

The study employed a descriptive survey design, integrated within a convergent parallel mixed-methods framework to allow for a comprehensive analysis of the research problem.

A sample size of 210 households was scientifically calculated from a total population of 472 households residing in the four target villages. A stratified random sampling technique was used to select the households. The households in each village were first stratified based on their perceived economic status (as identified by local village elders) into three strata: low, medium, and high income. Households were then selected randomly and proportionally from within each stratum. This method was crucial for ensuring that the final sample was representative of the different economic segments within the community.

Data collection utilized a multi-tool, mixed-methods approach to ensure triangulation and enhance the validity of the findings:

Structured Questionnaires: These were the primary instruments for collecting quantitative data. They were administered face-to-face to the heads of the 210 sampled households. The questionnaire was divided into sections to collect detailed data on: (a) demographic and socio-economic characteristics (age, gender, level of education, household size, primary and secondary sources of income); (b) the household's level of dependency and demand for specific park resources (e.g., fuelwood, construction poles, grazing); and (c) their awareness of, and level of participation in, the formal Resource Access Agreements (RAAs) with the park management.

Semi-structured Interviews: These were conducted to gather rich, in-depth qualitative data. Key informants were purposively selected and included village elders, local chiefs and assistant chiefs, senior park personnel from the Kenya Wildlife Service (KWS), and representatives from local community-based organizations. The interviews explored the history of park-community relations, the perceived effectiveness of the current participatory management structures, and the underlying social and cultural attitudes towards conservation.

Measurement and Observation Checklists: To move beyond self-reported data and to objectively quantify the actual patterns of resource extraction, a systematic direct observation method was employed. A 30 km stretch of the park boundary adjacent to the four study villages was demarcated. The researcher, accompanied by local field assistants, traversed this transect and used a detailed checklist to systematically record and quantify all visible signs of human disturbance. This involved: counting and measuring the diameter of recently cut tree stumps to estimate timber and pole extraction; identifying and counting the number of illegal entry trails into the park; counting the number of livestock (cattle, goats, sheep) found grazing illegally within the park boundary; identifying and mapping the locations of active and abandoned charcoal kilns; and documenting any signs of deliberately set fires. This provided a robust, objective dataset on the actual "on-the-ground" human impact.

3.3 Statistical Analysis

The collected data were coded and meticulously entered into the Statistical Package for Social Sciences (SPSS) Version 25.0 for analysis.

Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to profile the demographic and socio-economic characteristics of the respondents and to quantify the levels of human disturbances observed along the park boundary.

To test the study's core hypotheses, inferential statistics were employed. Pearson correlation was used to measure the strength and direction of the association between the key continuous socio-economic variables (e.g., income level, years of education) and the level of

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.
formal participation in conservation activities. Chi-square tests of independence were used to determine if statistically significant relationships existed between the categorical demographic segments (e.g., gender, marital status) and the engagement in specific resource extraction activities (Mwongela, 2015). All tests were conducted at a 0.05 level of significance.

4. Study Findings

4.1 Demographic and Socio-Economic Profile

The socio-economic survey of the 210 households revealed a community facing significant economic hardship and high levels of resource dependency.

Education: A substantial majority of the household heads (58%) had only attained a primary level of education, with an additional 15% having no formal education at all. Only a small fraction (7%) had progressed to tertiary education. This indicates a low level of educational attainment, which can limit access to formal employment opportunities.

Income: The income data painted a stark picture of poverty. An overwhelming 87% of the respondents reported earning a monthly household income of less than Ksh. 5,000 (which was approximately USD 50 at the time of the study). This level of income is well below the national poverty line and indicates a high degree of economic vulnerability. Subsistence farming was reported as the primary source of income for 90% of the households, highlighting the community's heavy reliance on rain-fed agriculture in a semi-arid environment.

4.2 Participation Levels and Socio-Economic Links

The study rigorously tested the central hypothesis that a household's socio-economic characteristics would significantly influence their level of public participation in the formal management of Chyulu National Park. The Pearson correlation analysis, however, yielded a surprising and counter-intuitive result. The analysis found no statistically significant relationship between a household's level of formal participation and its key socio-economic characteristics. The correlation between participation and the primary source of income was not significant ($p = 0.478$), nor was the correlation with the monthly income level ($p = 0.660$). This indicates that being wealthier or poorer, or being a farmer versus having another occupation, did not directly correlate with a household's decision to be formally involved in park management activities such as attending RAA meetings or participating in joint patrols (Mwongela, 2015).

4.3 Influence of Gender, Age, and Marital Status on Resource Extraction

While formal participation was not linked to socio-economic status, the patterns of informal or illegal resource extraction were found to be significantly influenced by key demographic segments, revealing a socially differentiated pattern of interaction with the park.

Gender: The extraction of resources for domestic energy, such as firewood and charcoal, did not differ significantly by gender, suggesting these are general household needs. However, the extraction of grass for livestock fodder was found to be significantly determined by gender ($p = 0.028$), being a predominantly male activity associated with herding responsibilities. Similarly, the collection of *miraa* (khat), a mild stimulant with commercial

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

value, was also found to be significantly gendered ($p = 0.046$), with men and young boys gathering the bulk of it for both personal consumption and sale at local markets.

Age and Marital Status: The age of the respondent did not significantly influence the overall pattern of extraction, nor did marital status, with one notable exception. The collection of grass was found to be significantly more common among married households ($p = 0.035$), a finding that directly correlates with the higher likelihood of married households owning livestock compared to unmarried individuals (Mwongela, 2015).

4.4 Patterns of Resource Extraction

The direct observation and measurement along the park boundary confirmed the community's high levels of dependency on the park's resources. The data revealed a significant and ongoing level of illegal extraction. Along the 30 km transect, the study recorded an average of 5 illegally harvested trees, 76 grazing cows, and 6 active or recent charcoal kilns per kilometer. The most sought-after and heavily extracted resources were identified as fuelwood (for domestic cooking and charcoal production) and construction poles (for building houses and livestock enclosures). These findings provide objective, quantifiable evidence that despite the existence of formal participatory structures, a substantial amount of unregulated resource extraction continues to be a primary threat to the park's ecological integrity (Mwongela, 2015).

5. Discussion and Conclusion

5.1 Interpretation of Results

The study's most compelling and theoretically significant finding is the profound disconnect between socio-economic status and formal participation in conservation. The fact that a household's income, education level, or occupation did not predict their level of involvement in the formal RAAs is a critical and sobering result. It strongly suggests that the existing participatory mechanisms, as currently structured, may not be offering sufficient, tangible, or relevant incentives to meaningfully engage the community, particularly those who are struggling with deep-seated poverty. This finding aligns with a broader body of critical research in Kenya which shows that many benefit-sharing mechanisms are perceived by local communities as being inadequate, inequitably distributed, and ultimately failing to offset the very real economic costs of living in close proximity to protected areas. As a result, they do little to fundamentally change local attitudes or behaviors (Wekesa et al., 2021). The formal participatory structures at CNP appear to be operating on a plane that is disconnected from the daily economic realities of the people they are meant to engage.

However, it is equally clear that these same socio-economic realities are the fundamental drivers of how communities informally and illegally interact with the park. The extremely low-income levels and the heavy reliance on climate-vulnerable subsistence agriculture directly fuel the high demand for the park's resources. This is a classic and tragic example of the poverty-conservation trap, a vicious cycle where short-term, desperate survival needs inevitably override any consideration for long-term environmental sustainability. When a family's choice is between illegally cutting down a tree to make charcoal to sell for food or going hungry, the choice is a foregone conclusion.

Furthermore, the study clearly demonstrates that the pressure on the park is not undifferentiated. The patterns of extraction are deeply shaped by the community's social structures, particularly the traditional division of labor by gender. The finding that men are primarily responsible for extracting grazing resources and commercial products

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

like *miraa* directly reflects their culturally prescribed roles in livestock herding and income generation. This confirms that conservation pressures are not uniform across a community but are shaped and directed by social norms. This finding is consistent with a growing body of research which confirms that empowering women in natural resource management can often lead to better and more sustainable conservation outcomes, yet many conservation policies continue to be gender-blind, failing to adequately account for the distinct gendered roles in resource access, use, and control (Leisher et al., 2016).

5.2 Policy Implications

The findings of this study lead to several critical and urgent policy implications for the management of Chyulu National Park and other similarly situated protected areas in Kenya and beyond:

Address the Economic Drivers Head-On: Conservation programs cannot succeed if they continue to ignore or treat as secondary the profound socio-economic realities of the communities living at their borders. Interventions must move beyond conservation-centric activities and focus on reducing resource dependency through targeted livelihood diversification. This could include investing in projects like dryland farming of high-value crops, promoting fuel-saving technologies (like energy-efficient jikos) to reduce fuelwood demand, and supporting community-led tree nurseries for the cultivation of fast-growing exotic trees for domestic fuel and construction needs (Oldekop et al., 2016).

Create Tangible, Direct, and Household-Level Benefits: To make community participation meaningful and effective, the benefits derived from conservation must be direct, valuable, and equitably distributed at the household level. The current reliance on communal benefits (like the construction of a school classroom) is often insufficient, as these benefits are perceived as distant, intangible, or captured by local elites. A more effective approach would be to develop park-related enterprises that provide direct and regular income to households, such as community-run beekeeping projects, certified sustainable charcoal production in designated buffer zones, or the training and employment of local youth as eco-tourism guides or community wildlife scouts (Wekesa et al., 2021).

Acknowledge and Respond to Social Heterogeneity: Community-Based Conservation policies must urgently move beyond treating communities as monolithic, homogenous entities. Management plans and participatory processes must be socially nuanced to account for the different roles, needs, and power dynamics of men and women. This means creating specific strategies to ensure that women are not just included as token participants in community meetings, but are genuinely empowered in the decision-making processes, particularly regarding the resources they traditionally manage (Leisher et al., 2016).

5.3 Conclusion

The link between socio-economic factors and public participation in the conservation of protected areas is far more complex and nuanced than is often assumed in policy and practice. At Chyulu National Park, this study found no direct statistical link between a household's wealth or level of education and its decision to participate in formal management structures. However, it is these very same socio-economic characteristics that are the primary determinants of the informal resource use and illegal extraction patterns that represent the most significant and ongoing threat to the park's ecological integrity. Effective and sustainable conservation, therefore, depends not on simply creating more participatory

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

meetings or committees, but on designing and implementing intelligent, evidence-based interventions that fundamentally address the economic poverty and the social dynamics that drive resource dependency in the first place. Until the communities bordering the park see conservation as a direct and viable pathway out of poverty, they will continue to view the park not as a shared heritage to be protected, but as a resource to be exploited for their own survival.

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.

References

Abiona, O. I. (2022). Influence of principals' delegation of authority on teachers' job performance in secondary schools in Nigeria. *International Journal of Educational Management, 36*(4), 543-556.

Adams, W. M., & Hutton, J. (2007). People, parks and poverty: Political ecology and biodiversity conservation. *Conservation and Society, 5*(2), 147-183.

Bennett, N. J., Roth, R., Klain, S. C., Chan, K. M. A., Christie, P., Clark, D. A., Cullman, G., Curran, D., Durbin, T. J., Epstein, G., Greenberg, A., Nelson, M. P., Sandlos, J., Stedman, R., Teel, T. L., Thomas, R., Veríssimo, D., & Wyborn, C. (2017). Conservation social science: Understanding and integrating the human dimensions of conservation. *Biological Conservation, 205*, 93-108. https://doi.org/10.1016/j.biocon.2016.10.006

Brockington, D. (2002). *Fortress conservation: The preservation of the Mkomazi Game Reserve, Tanzania*. James Currey.

Gatiso, T. T., Mdemu, M. V., & Schusser, C. (2022). Determinants of local communities' participation in participatory forest management: The case of Sodo Community Forest in the Rift Valley of Ethiopia. *Trees, Forests and People, 7*, 100185. https://doi.org/10.1016/j.tfp.2021.100185

Harris, A., & Jones, M. (2017). Middle leadership in schools: A review of the literature. *School Leadership & Management, 37*(4), 335-351.

Kajembe, G. C., & Kessy, J. F. (2000). Joint forest management in the southern highlands of Tanzania: A process of empowering local communities. *Journal of Tropical Forest Science, 12*(4), 651-669.

Kongnyuy, D. B. (2020). The impact of delegation on teacher motivation in secondary schools in Cameroon. *Journal of Education and Practice, 11*(18), 78-86.

Leisher, C., Temsah, G., Booker, F., Day, M., Samberg, L., Prosnitz, D., Agarwal, B., & Matthews, E. (2016). Does the gender composition of forest and fishery management groups affect resource governance and conservation outcomes? A systematic map. *Environmental Evidence, 5*(1), 6. https://doi.org/10.1186/s13750-016-0057-8

Leithwood, K., & Mascall, B. (2008). Collective leadership effects on student achievement. *Educational Administration Quarterly, 44*(4), 529-561.

Manundu, P. M., Were, S., & Ombui, K. (2022). Effect of delegation of duties on teacher retention in public secondary schools in Nairobi County, Kenya. *The Strategic Journal of Business & Change Management, 9*(2), 114-128.

Masaku, C., Kalai, J., & Oduor, M. (2018). Determinants of effective delegation of duties by principals in public secondary schools in Kenya. *International Journal of Education and Research, 6*(3), 123-134.

Mwongela, M. N. (2015). *An assessment of patterns of vegetative resource extraction within south-eastern edge of Chyulu National Park, Makueni County, Kenya* [Unpublished master's thesis]. Kenyatta University.

Oldekop, J. A., Sims, K. R., Wunder, S., & Agrawal, A. (2016). A meta-analysis of the effects of community forest management on deforestation and poverty outcomes. *Conservation Letters, 9*(3), 183-195. https://doi.org/10.1111/conl.12213

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

Redpath, S. M., Bhatia, S., & Young, J. (2015). Tilting at wildlife: Reconsidering human-wildlife conflict. *Oryx, 49*(2), 222-225. https://doi.org/10.1017/S003060531400019X

Citation: Mwongela, M. N; Mahiri, I. O & Osebe, D. A. (2025). Socio-Economic Determinants of Public Participation in Protected Area Management: A Case Study of Chyulu National Park, Kenya. *Journal of African Interdisciplinary Studies*, 9(8), 201- 212.
Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.

Seth, E. A., & Ntirandekura, D. (2022). Delegation of responsibilities and its effect on teachers' performance in public secondary schools in Uganda. *East African Journal of Education and Social Sciences, 3*(2), 104-113.

Shah, S. A., & Kazimi, S. M. (2020). Impact of delegation of authority on job satisfaction and job performance: A study of higher education institutions in Pakistan. *Journal of Business and Social Review in Emerging Economies, 6*(2), 521-532.

Somech, A. (2010). The role of delegation in school leadership: A study of Malaysian principals. *Educational Management Administration & Leadership, 38*(5), 586-604.

Spillane, J. P. (2006). *Distributed leadership*. Jossey-Bass.

Wekesa, C., Gichuki, N., & Nyingi, W. D. (2021). Effectiveness of benefit sharing programs in addressing human-wildlife conflicts in the Amboseli ecosystem, Kenya. *Global Ecology and Conservation, 27*, e01552. https://doi.org/10.1016/j.gecco.2021.e01552

Western, D. (2001). Human-modified ecosystems and future evolution. *Proceedings of the National Academy of Sciences, 98*(10), 5458-5465.