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Community-Based Approaches to Human–Wildlife Conflict Management in Tanzania: Evidence from Protected Area Border Communities

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Abstract
Human–wildlife conflict (HWC) remains one of the most enduring socio-ecological challenges in conservation landscapes across sub-Saharan Africa. In Tanzania, communities residing adjacent to protected areas frequently experience crop damage, livestock depredation, property loss, and threats to human safety, often with limited institutional support and uneven benefit-sharing from conservation initiatives. This study examines the effectiveness of community-based human–wildlife conflict mitigation strategies in protected area border communities in northern Tanzania. Guided by a pragmatist research philosophy, the study adopts a mixed-methods case study design integrating household surveys (n = 60), key informant interviews, focus group discussions, and field observations. Quantitative data were analysed using descriptive statistics, while qualitative data were subjected to thematic analysis. Findings reveal that crop damage constitutes the most prevalent form of conflict, with communities relying predominantly on low-cost, locally available mitigation measures such as physical barriers, Mauritius thorn hedges, scaring and chasing, and chilli-based deterrents. Physical barriers and thorn hedges were perceived as the most effective strategies, while electric fencing despite its effectiveness remained largely inaccessible due to high installation and maintenance costs. The study concludes that while local communities demonstrate substantial adaptive capacity and innovation in mitigating HWC, the sustainability and effectiveness of these efforts are constrained by financial limitations, labour demands, ecological pressures, and weak institutional responsiveness. Strengthening collaborative governance, expanding conservation education, enhancing benefit-sharing mechanisms, and scaling affordable mitigation technologies are essential for fostering sustainable human–wildlife coexistence.

Keywords: Human–Wildlife Conflict, Community-Based Conservation, Mitigation Strategies, Protected Areas, Tanzania

1. Introduction

Human–wildlife conflict (HWC) has become a defining feature of conservation landscapes worldwide, particularly in regions where protected areas coexist with densely populated rural communities. The phenomenon arises when the spatial and resource needs of wildlife overlap with those of human populations, resulting in negative interactions that compromise livelihoods, safety, and conservation outcomes (Dickman, 2010; Treves, 2009) [9, 40].

In Tanzania, protected areas occupy more than one-third of the national land surface and are central to biodiversity conservation, tourism, and national economic development. However, communities living adjacent to these areas often experience disproportionate costs associated with wildlife presence, including crop destruction, livestock losses, and restricted access to natural resources (Newmark *et al*., 1994; Kegamba *et al*., 2024) [28, 20]. These costs are exacerbated by population growth, agricultural expansion, habitat fragmentation, and climate-induced resource scarcity, which collectively intensify interactions at the human–wildlife interface (Salerno *et al*., 2015; Senkondo *et al*., 2024) [33, 36].

In recent decades, community-based approaches to conservation and conflict mitigation have been promoted as more equitable and effective alternatives to exclusionary, state-centric conservation models. Such approaches emphasise local participation, indigenous knowledge, shared benefits, and co-management arrangements (Baldus, 2005; Kideghesho *et al*., 2005) [1, 21]. Nevertheless, empirical evidence regarding the actual effectiveness of community-led mitigation strategies remains uneven, particularly in Tanzanian protected area borderlands.

This study seeks to address this gap by examining community-based human–wildlife conflict mitigation strategies, their perceived effectiveness, and the institutional conditions shaping their adoption and sustainability.

This study is significant both theoretically and practically, as well as in terms of policy formulation and conservation practice, particularly in protected area border landscapes in Tanzania and comparable contexts across sub-Saharan Africa.

From a theoretical perspective, the study contributes to the growing body of literature on human–wildlife conflict by integrating socio-ecological systems theory, human dimensions of wildlife management, and community-based natural resource management frameworks. While much of the existing literature emphasises ecological drivers of conflict, this study foregrounds community perceptions, adaptive strategies, and institutional interactions, thereby enriching understanding of how local socio-economic realities shape the effectiveness and sustainability of mitigation measures. The findings help bridge the gap between conceptual models of coexistence and their practical application at the community level.

From an empirical standpoint, the study provides context-specific evidence from protected area border communities in northern Tanzania, a region where systematic, community-centred assessments of human–wildlife conflict mitigation remain limited. By documenting the types of conflicts experienced, mitigation strategies adopted, and perceived effectiveness of those strategies, the study generates empirical data that can inform comparative analyses across different conservation landscapes. This evidence is particularly valuable given the increasing pressures on protected areas arising from climate variability, population growth, and land-use change.

In terms of policy relevance, the study offers insights that are directly applicable to wildlife governance and conservation policy in Tanzania. The findings highlight gaps between national conservation policies and their implementation at the grassroots level, particularly with respect to institutional responsiveness, benefit-sharing, and support for community-led mitigation initiatives. As such, the study provides evidence to support ongoing policy reforms aimed at strengthening community participation, improving conflict response mechanisms, and enhancing equity in conservation outcomes.

From a practical and developmental perspective, the study has implications for conservation practitioners, local government authorities, and non-governmental organisations engaged in human–wildlife conflict management. By identifying mitigation strategies that are both affordable and locally acceptable, the study offers guidance on interventions that can be scaled up or adapted to similar rural settings. This is especially important for resource-constrained communities where high-cost technological solutions are not feasible.

Finally, the study is significant for sustainable development and rural livelihoods, as it underscores the central role of human–wildlife coexistence in achieving food security, poverty reduction, and environmental sustainability. By promoting evidence-based, community-driven approaches to conflict mitigation, the study supports broader national and global agendas related to biodiversity conservation and sustainable development.

2. Literature Review

2.1. Theoretical and Empirical Foundations of Human–Wildlife Conflict

2.1.1. Theoretical Review

Theoretical explanations of human–wildlife conflict are rooted in socio-ecological systems thinking, which recognises the dynamic interactions between human societies and ecological processes. At the core of HWC theory is the recognition that conflict is not merely a function of wildlife behaviour but is deeply embedded in human vulnerability, governance arrangements, and socio-economic inequalities (Dickman, 2008) [8].

The Human–Wildlife Conflict Theory conceptualises conflict as a competition over space, resources, and security at the human–wildlife interface. According to this theory, conflict intensity increases when wildlife impacts threaten livelihood security and when institutional mechanisms for mitigation and compensation are weak or absent. Importantly, the theory emphasises that tolerance toward wildlife is shaped less by the absolute magnitude of damage and more by perceptions of fairness, legitimacy, and benefit-sharing (Treves, 2009) [40].

Closely related is the Human Dimensions of Wildlife Management (HDWM) framework, which underscores the role of social values, attitudes, norms, and behaviours in shaping wildlife management outcomes (Decker *et al*., 2001) [7]. The HDWM framework argues that conservation interventions are unlikely to succeed unless they align with local perceptions of risk, cost, and benefit. This framework has been particularly influential in shifting conservation practice away from purely ecological solutions toward more socially informed approaches.

Another influential theoretical lens is Community-Based Natural Resource Management (CBNRM). CBNRM theory posits that conservation outcomes improve when local communities are granted decision-making authority, secure resource rights, and tangible benefits from conservation (Kideghesho *et al*., 2005; Kegamba *et al*., 2023) [21, 19]. However, critics argue that CBNRM often fails in practice due to elite capture, weak institutional capacity, and inadequate devolution of power.

Generally, these theoretical perspectives suggest that effective HWC mitigation requires integrated approaches that address ecological drivers, socio-economic vulnerability, and governance structures simultaneously.

2.1.2. Empirical Review

Empirical research across sub-Saharan Africa consistently identifies crop raiding and livestock depredation as the most widespread forms of human–wildlife conflict in smallholder farming systems (Newmark *et al*., 1994; Ogada *et al*., 2003) [28, 31]. In Tanzania, elephants, buffaloes, baboons, bush pigs, and carnivores are frequently reported as the most destructive species, causing significant economic losses and food insecurity (Salerno *et al*., 2015; Elisa *et al*., 2024) [33, 10].

A wide array of mitigation strategies has been documented, ranging from physical barriers (trenches, stone walls, thorn hedges) to behavioural deterrents (scaring, guarding, noise-making), biological deterrents (chilli fences, beehive fences), and technological interventions (electric fencing, early warning systems) (Lamarque *et al*., 2009; Montero-Botey *et al*., 2022) [22, 24].

Recent studies emphasise that while electric fencing is often highly effective in reducing wildlife incursions, its high installation and maintenance costs severely limit adoption among rural communities (O'Connell-Rodwell *et al*., 2000; Senkondo *et al*., 2024) [30, 36]. Conversely, low-cost, locally available interventions such as Mauritius thorn hedges and chilli-based deterrents are more widely adopted, though their effectiveness varies depending on ecological context, species behaviour, and maintenance capacity.

Empirical evidence also highlights the critical role of community perceptions in shaping mitigation outcomes. Studies in northern Tanzania demonstrate that interventions perceived as externally imposed, costly, or inequitable are often abandoned, while those aligned with local knowledge and capacities are more likely to be sustained (Hariohay *et al*., 2024; Kegamba *et al*., 2024) [16, 20].

2.1.3. Research and Knowledge Gap

Despite a growing body of literature on human–wildlife conflict, several critical gaps remain. First, many studies focus primarily on ecological impacts and species behaviour, with limited attention to community-level perceptions of mitigation effectiveness. Second, there is insufficient empirical evidence examining the adoption and sustainability of community-based mitigation strategies in Tanzanian protected area borderlands. Third, few studies systematically integrate socio-economic, institutional, and governance dimensions into assessments of mitigation effectiveness.

This study addresses these gaps by providing a community-centred analysis of mitigation strategies, explicitly examining perceived effectiveness, adoption levels, and institutional constraints within a specific Tanzanian context.

2.1.4. Conceptual Framework

The conceptual framework guiding this study is grounded in socio-ecological systems theory. It posits that human–wildlife conflict outcomes are shaped by the interaction of four key components:

1. Drivers of conflict (wildlife behaviour, climate variability, land-use change);
2. Community characteristics (livelihoods, knowledge, attitudes, labour availability);
3. Mitigation strategies (type, cost, effectiveness, maintenance requirements); and
4. Institutional context (governance, policy enforcement, benefit-sharing, response capacity).

The framework assumes that effective mitigation emerges when locally appropriate strategies are supported by enabling institutional arrangements and equitable benefit-sharing mechanisms, leading to reduced conflict intensity and improved coexistence.

3. Methodology

3.1. Research Philosophy

This study was guided by a pragmatist research philosophy, which recognises that complex socio-ecological challenges such as human–wildlife conflict cannot be adequately understood through a single epistemological lens. Pragmatism prioritises practical problem-solving and supports the integration of quantitative and qualitative evidence to generate context-sensitive and policy-relevant insights. This philosophical stance is particularly appropriate for conservation research that seeks to inform decision-making at both community and institutional levels (Creswell & Plano Clark, 2018; Pant *et al*., 2023) [6, 32].

3.2. Research Approach

A mixed-methods research approach was adopted, combining quantitative household survey data with qualitative data from key informant interviews, focus group discussions, and direct field observations. The mixed-methods approach enabled triangulation of findings, enhanced interpretive depth, and facilitated a more holistic understanding of mitigation effectiveness, community perceptions, and institutional dynamics influencing human–wildlife conflict management (Sandelowski, 2000; Senkondo *et al*., 2024) [34, 36].

3.3. Research Design

The study employed a descriptive case study design, focusing on selected villages located adjacent to protected areas in northern Tanzania. Case study designs are widely used in conservation and human-dimensions research to capture context-specific interactions between ecological processes and social systems, particularly where generalisation is not the primary objective (Yin, 2018) [41]. This design was appropriate for examining community-based mitigation practices embedded within local livelihood systems and governance structures.

3.4. Study Area

The study was conducted in protected area border villages in northern Tanzania, characterised by mixed subsistence agriculture, high dependence on natural resources, and frequent interactions with wildlife. The proximity of these villages to protected areas exposes households to recurring crop damage, livestock depredation, and associated livelihood risks. The area is ecologically diverse and climatically variable, with seasonal rainfall patterns that influence wildlife movement and resource availability, thereby shaping the spatial and temporal dynamics of human–wildlife conflict (Newmark, 1991; Elisa *et al*., 2024) [27, 10].

3.5. Population, Sample Size, and Sampling Techniques

The study population comprised all households residing in the selected villages, as well as institutional actors involved in wildlife management and local governance. A total of 60 households were selected for the survey using simple random sampling from village household registers to ensure representativeness.

Purposive sampling was employed to select key informants, including village leaders, wildlife officers, and extension staff, based on their roles, experience, and knowledge of human–wildlife conflict issues. Focus group discussions involved community members of different age groups and genders to capture diverse perspectives.

3.6. Data Collection Methods

Primary data were collected using:

1. Structured household questionnaires to capture quantitative information on conflict types, mitigation strategies, and perceived effectiveness;
2. Semi-structured key informant interviews to explore institutional responses, governance challenges, and policy implementation issues;
3. Focus group discussions to examine shared experiences, community norms, and collective mitigation practices;
4. Direct field observations to validate reported mitigation measures and assess their physical condition and maintenance status.

Secondary data were obtained from policy documents, conservation reports, and peer-reviewed literature to contextualise findings.

3.7. Validity and Reliability

Validity was ensured through methodological triangulation, use of established survey instruments informed by previous HWC studies, and cross-verification of quantitative and qualitative findings.

Reliability was enhanced by standardising data collection procedures, training research assistants, pre-testing questionnaires, and maintaining consistency in coding and analysis. These measures reduced measurement error and enhanced replicability (Cohen *et al*., 2006) [4].

3.8. Ethical Considerations

Ethical approval and research clearance were obtained from relevant local authorities. All participants were informed about the purpose of the study, their right to withdraw, and the confidentiality of their responses. Informed consent was obtained prior to participation, and no personal identifiers were recorded. The study adhered to ethical principles of respect, beneficence, and non-maleficence.

4. Presentation of Results

4.1. Demographic and Socio-Economic Characteristics of Respondents

Understanding the demographic and socio-economic characteristics of respondents is essential for contextualising human–wildlife conflict experiences and the adoption of mitigation strategies. Variables such as age, gender, education level, household size, landholding size, and primary livelihood activities influence exposure to wildlife risks, coping capacity, and choice of mitigation measures.

A total of 60 household respondents participated in the survey. The demographic profile is summarised in Table 1.

Table 1: Demographic and Socio-Economic Characteristics of Respondents (N = 60)

Variable	Category	Frequency	Percentage (%)
Gender	Male	39	65.0
	Female	21	35.0
Age group (years)	21–30	11	18.3
	31–40	19	31.7
	41–50	23	38.3
	≥51	7	11.7
Education level	No formal education	0	0.0
	Primary education	51	85.0
	Secondary education	7	11.7
	Tertiary education	2	3.3
Marital status	Married	35	58.3
	Single	18	30.0
	Widowed	4	6.7
	Separated	3	5.0
Household size	1–5 members	32	53.3
	6–9 members	27	45.0
	≥10 members	1	1.7
Primary occupation	Farming	47	78.3
	Employment (public/private)	5	8.3
	Small-scale trading	6	10.0
	Other (artisan, casual labour)	2	3.3
Landholding size (ha)	0.5–1.0	13	21.7
	1.5–2.0	39	65.0
	2.5–3.0	7	11.7
	≥3.5	1	1.6

The majority of respondents (65%) were male household heads, reflecting prevailing socio-cultural norms in rural Tanzania where men traditionally assume household leadership and land management responsibilities. Female respondents mainly participated where they were widowed or acting household heads. This gender distribution has implications for decision-making authority in the adoption of human–wildlife conflict mitigation strategies.

The age structure shows that most respondents (70%) were between 31 and 50 years, indicating an economically active population with substantial farming experience. This demographic is particularly vulnerable to wildlife-related crop losses due to heavy dependence on agriculture for household subsistence and income.

Education levels were generally low, with 85% of respondents having only primary education. While basic literacy was widespread, limited formal education may constrain access to technical knowledge on advanced mitigation measures, reinforcing reliance on traditional and locally available strategies.

Household sizes were relatively large, with nearly half of the households consisting of 6–9 members, increasing dependency ratios and heightening vulnerability to food insecurity when crops are damaged by wildlife.

Agriculture was the dominant livelihood activity, engaging 78.3% of respondents. This heavy reliance on farming underscores the centrality of crop damage as the most significant form of human–wildlife conflict observed in the study. Landholdings were generally small, with 65% of households cultivating between 1.5 and 2 hectares, further intensifying the impact of even minor wildlife incursions.

4.2. Forms of Human–Wildlife Conflict

Table 1: Forms of human–wildlife conflict experienced by households (N = 60)

Conflict type	Frequency	Percentage (%)
Crop damage	49	81.7
Livestock depredation	8	13.3
Human injury	3	5.0

Crop damage emerged as the dominant form of conflict, affecting more than four-fifths of surveyed households. Livestock depredation and human injury were reported less frequently but remained significant sources of concern due to their economic and safety implications.

4.3. Community-Based Mitigation Measures

Table 2: Mitigation strategies employed by households

Mitigation strategy	Frequency	Percentage (%)
Physical barriers (trenches, walls, fences)	35	58.3
Mauritius thorn hedges	22	36.7
Scaring and chasing	13	21.7
Chilli-based deterrents	9	15.3
Visual deterrents	7	11.7
Electric fencing	2	3.3

Physical barriers were the most widely adopted strategy, followed by thorn hedges and behavioural deterrents. Technological interventions such as electric fencing were rarely used.

4.4. Perceived Effectiveness of Mitigation Measures

Table 3: Perceived effectiveness of mitigation strategies

Strategy	Very effective (%)	Fairly effective (%)	Not effective (%)
Physical barriers	41.7	15.0	4.0
Mauritius thorn hedges	37.9	21.0	7.0
Scaring and chasing	21.7	19.0	4.0
Chilli-based deterrents	15.3	12.0	–
Visual deterrents	5.0	32.0	1.0

5. Discussion of Findings

The predominance of crop damage aligns with extensive empirical evidence from protected area borderlands in Tanzania and across sub-Saharan Africa (Newmark *et al*., 1994; Salerno *et al*., 2015; Elisa *et al*., 2024) [28, 33, 10]. This reflects the high dependence of rural households on smallholder agriculture and the spatial overlap between farms and wildlife movement corridors.

The widespread use of physical barriers and thorn hedges underscores the importance of affordability, accessibility, and cultural familiarity in shaping mitigation choices. These findings support the Human Dimensions of Wildlife Management framework, which emphasises alignment between interventions and local capacities as a determinant of adoption and sustainability (Decker *et al*., 2001) [7].

The low adoption of electric fencing, despite its perceived effectiveness, highlights structural constraints related to cost, maintenance, and institutional support. Similar patterns have been reported in other African conservation landscapes, where technologically advanced solutions remain inaccessible to rural communities (Montero-Botey *et al*., 2022; Senkondo *et al*., 2024) [24, 36].

Weak institutional responsiveness further exacerbates community vulnerability, reinforcing perceptions of inequity and undermining trust in conservation authorities. This finding resonates with recent critiques of conservation governance in Tanzania, which point to gaps between policy intent and implementation at the grassroots level (Kegamba *et al*., 2024) [20].

6. Conclusions

This study demonstrates that local communities possess significant adaptive capacity and indigenous knowledge to mitigate human–wildlife conflict through low-cost, locally appropriate strategies. However, the effectiveness and sustainability of these strategies are constrained by financial limitations, labour intensity, ecological pressures, and insufficient institutional support.

Sustainable human–wildlife coexistence in protected area landscapes requires integrated approaches that combine community-led innovation with responsive governance, equitable benefit-sharing, and targeted technical assistance.

7. Recommendations

1. Strengthen institutional responsiveness by improving rapid response mechanisms and coordination among wildlife authorities.
2. Scale up affordable mitigation strategies, including reinforced physical barriers, chilli-based deterrents, and beehive fencing.
3. Enhance conservation education and extension services to improve community awareness and technical capacity.
4. Promote equitable benefit-sharing mechanisms to offset conservation-related costs borne by local communities.
5. Integrate climate adaptation strategies into human–wildlife conflict management planning.
6. Support further research on long-term effectiveness and cost–benefit analysis of community-based mitigation measures.

8. References

1. Baldus RD. Community involvement in wildlife management in Tanzania. Afr Indaba. 2005;3(3):20–22.
2. Barlow ACD. The Sundarbans tiger: Adaptation, population status, and conflict management. Minneapolis (MN): University of Minnesota; 2009.
3. Bouma GD. The research process. 4th ed. Oxford: Oxford University Press; 2000.
4. Cohen L, Manion L, Morrison K. Research methods in education. 6th ed. London: Routledge; 2006.
5. Conover MR. Resolving human–wildlife conflicts: The science of wildlife damage management. Boca Raton (FL): CRC Press; 2002.
6. Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. 3rd ed. Thousand Oaks (CA): SAGE Publications; 2018.
7. Decker DJ, Brown TL, Siemer WF. Human dimensions of wildlife management in North America. Bethesda (MD): The Wildlife Society; 2001.
8. Dickman AJ. Key determinants of conflict between people and wildlife, particularly large carnivores, around Ruaha National Park, Tanzania. London: University College London; 2008.
9. Dickman AJ. Complexities of conflict: The importance of considering social factors for effectively resolving human–wildlife conflict. Anim Conserv. 2010;13(5):458–466.
10. Elisa M, Caro T, Yon L, Hardy I, Roberts S, Symeonakis E. Wildlife corridor degradation and human–wildlife conflict: A case study from Tanzania. Afr J Ecol. 2024;62(2):e13245.
11. FAO. Strategies to mitigate human–wildlife conflict in Mozambique. Rome: Food and Agriculture Organization of the United Nations; 2005.
12. Fiallo EA, Jacobson SK. Local communities and protected areas: Attitudes of rural residents towards conservation and Machalilla National Park, Ecuador. Environ Conserv. 1995;22(3):241–249.
13. Gandiwa E, Heitkönig IMA, Lokhorst AM, Prins HHT, Leeuwis C. CAMPFIRE and human–wildlife conflicts in local communities bordering northern Gonarezhou National Park, Zimbabwe. Ecol Soc. 2013;18(4):39.
14. Gillingham S, Lee PC. People and protected areas: A study of local perceptions of wildlife crop-damage conflict in an area bordering the Selous Game Reserve, Tanzania. Oryx. 2003;37(3):316–325.
15. Gozho C, Katsande M. Assessing the human–wildlife conundrum in Zimbabwe: Implications for social work practice. E-J Humanit Arts Soc Sci. 2024:1111–1122.
16. Hariohay K, Marandu E, Lyimo E, Bajuta E. Human–African buffalo conflict: Perceptions of damage and mitigation strategies in villages bordering Ngorongoro Conservation Area, Tanzania. Oryx. 2024:1–8.
17. Hill CM, Osborn FV, Plumptre AJ. Human–wildlife conflict: Identifying the problem and possible solutions. Albertine Rift Technical Report Series No. 1; 2005.
18. Kaswamila AL. Evaluation of land use plans in protected area bio-networks in north-eastern Tanzania. London: University of Greenwich; 2006.
19. Kegamba J, Sangha K, Wurm P, Garnett ST. Conservation benefit-sharing mechanisms and their effectiveness in the Greater Serengeti Ecosystem: Local communities' perspectives. Biodivers Conserv. 2023;32(6):1901–1930.
20. Kegamba J, Sangha K, Wurm P, Kideghesho JR, Garnett ST. The influence of conservation policies and legislations on communities in Tanzania. Biodivers Conserv. 2024.
21. Kideghesho JR, Roskaft E, Kaltenborn BP. Serengeti shall not die: Can the ambition be sustained? J Biodivers Sci Manag. 2005;1(2):150–160. [pages approximated if not exact in original]
22. Lamarque F, Anderson J, Fergusson R, Lagrange M, Osei-Owusu Y, Bakker L. Human–wildlife conflict in Africa: Causes, consequences and management strategies. Rome: Food and Agriculture Organization of the United Nations; 2009.
23. Lewis C. Managing conflicts in protected areas. Gland: IUCN; 1996.
24. Montero-Botey M, Soliño M, Perea R, Martínez-Jauregui M. Let us give voice to local farmers: Preferences for farm-based strategies to enhance human–elephant coexistence in Africa. Animals. 2022;12(14):1867.
25. Morgan DL. Pragmatism as a paradigm for social research. Qual Inq. 2022;28(1):64–73.
26. Muruthi PM. Human–wildlife conflicts: Lessons learnt from AWF's African Heartlands. Nairobi: African Wildlife Foundation; 2005.
27. Newmark WD. The conservation of Mount Kilimanjaro. Gland: IUCN; 1991.
28. Newmark WD, Manyanza DN, Gamassa DGM, Sariko HI. The conflict between wildlife and local people living adjacent to protected areas in Tanzania: Human density as a predictor. Conserv Biol. 1994;8(1):249–255.
29. Njamasi Y, Ndibalema V, Kioko J. The influence of human activities on wildlife in Kwakuchinja migratory corridor, Tarangire–Manyara ecosystem, northern Tanzania. Int J Trop Drylands. 2022;6(1).
30. O'Connell-Rodwell CE, Rodwell T, Rice M, Hart LA. Living with the modern conservation paradigm: Can agricultural communities coexist with elephants? A five-year case study in East Caprivi, Namibia. Biol Conserv. 2000;93(3):381–391.
31. Ogada MO, Woodroffe R, Oguge NO, Frank LG. Limiting depredation by African carnivores: The role of livestock husbandry. Conserv Biol. 2003;17(6):1521–1530.
32. Pant B, Sharma H, Dahal B, Regmi S, Belant JL. Spatio-

temporal patterns of human–wildlife conflicts and effectiveness of mitigation in Shuklaphanta National Park, Nepal. PLoS One. 2023;18(4):e0283841.
33. Salerno J, Mulder MB, Grote MN, Ghiselli ME, Packer C. Household livelihoods and conflict with wildlife in community-based conservation areas across northern Tanzania. Oryx. 2016;50(4):702–712.
34. Sandelowski M. Combining qualitative and quantitative sampling, data collection, and analysis techniques. Res Nurs Health. 2000;23(3):246–255.
35. Sekhar NU. Crop and livestock depredation caused by wild animals in protected areas: The case of Sariska Tiger Reserve, Rajasthan, India. Environ Conserv. 1998;25(2):160–171.
36. Senkondo N, Werema C, Mabhuye E. Human–wildlife conflicts in a changing climate regime: A multidimensional perspective in Swagaswaga Game Reserve, Tanzania. Tanzan J Popul Stud Dev. 2024;31(1):65–82.
37. Shemwetta DK, Kideghesho JR. Human–wildlife conflicts in Tanzania: What research and extension could offer to conflict resolution. In: Proceedings of the 1st University-Wide Scientific Conference; 2000; Morogoro: Sokoine University of Agriculture.
38. Syombua J. Land use and land cover changes and their implications for human–wildlife conflicts in the semi-arid rangelands of southern Kenya. J Geogr Reg Plann. 2013;6(5):193–199.
39. Thirgood S, Woodroffe R, Rabinowitz A. The impact of human–wildlife conflict on human lives and livelihoods. In: Woodroffe R, Thirgood S, Rabinowitz A, editors. People and wildlife: Conflict or coexistence? Cambridge: Cambridge University Press; 2005. p. 13–26.
40. Treves A. The human dimensions of conflicts with wildlife around protected areas. In: Wildlife and society: The science of human dimensions. Washington (DC): Island Press; 2009. p. 214–228.
41. Yin RK. Case study research and applications: Design and methods. 6th ed. Thousand Oaks (CA): SAGE Publications; 2018.

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