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# Assessing the Human-Wildlife Conundrum in Zimbabwe: Implications for Social Work Practice

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## ABSTRACT
Human-wildlife conflict is a global crisis that has significantly impacted the local livelihoods of the rural populace of the world. This study aimed to examine the consequences and effects of human-wildlife conflict in Mbire District, Ward 1, Zimbabwe. This paper analysed a range of issues, including human-wildlife conflict, poaching, habitat loss, and socio-economic impacts, all of which intertwine to create a complex web of challenges with severe consequences for both humans and wildlife alike. The study was informed by the Musha/Nyumba and social conflict theories. The research used the qualitative method, where structured face-to-face interviews were conducted. Data was gathered from a sample of thirty participants and three key informants who were purposively selected to participate in the study. The study utilized a case-study research design. Data collected from the interviews were analysed to identify categories, emerging themes, and areas of agreement or disagreement in relation to the research questions. The study revealed that the consequences of human-wildlife conflicts include competition for resources, threats to human safety, crop and livestock damage, conservation concerns, and disruption of ecosystem balance. The paper concluded that human-wildlife conflict is a serious global threat to sustainable development, food security, wildlife conservation, and health, a concern that is negatively affecting people, wildlife, and the achievement of sustainable development goals. Evidence-based recommendations were provided to policymakers and stakeholders, including education initiatives, compensation and insurance schemes, land use planning, community engagement, and the development of early warning systems. This paper contributes to the ongoing debate on the economics of human-wildlife conflict and the contribution of wildlife to local livelihoods.

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## INTRODUCTION
Human-wildlife conflict is defined as struggles that emerge when the presence or behavior of wildlife poses an actual or perceived direct and recurring threat to human interests or needs, leading to disagreements between groups or people and negative impacts on people and/or wildlife.[1] A human-wildlife conundrum in Zimbabwe represents a complex and multifaceted challenge that has largely been

[1] IUCN SSC, "What Is Human-Wildlife Conflict," *Briefing Paper by the IUCN SSC Human-Wildlife Conflict Task Force*, 2020.

overlooked, despite its far-reaching consequences. As a country renowned for its remarkable biodiversity and iconic wildlife, Zimbabwe's struggle to reconcile the needs and interests of its human population with the preservation of its natural heritage is an ongoing tragedy that demands attention and urgent action. This conundrum encompasses a range of issues, including human-wildlife conflict, poaching, habitat loss, and socio-economic impacts, all of which intertwine to create a complex web of challenges with severe consequences for both humans and wildlife alike. Wild animals in Zimbabwe have harmed thousands of people, more so than any other country.[2] Lions, hyenas, and elephants are on the rampage, killing people and cattle, which has led to media attention, public outcry, and calls for the relocation of wildlife.[3] The escalating interaction between wildlife and humans resulted in many injuries and fatalities globally.[4] The human-wildlife conflict in Zimbabwe presents a social and environmental challenge.[5] The coexistence of humans and wildlife in the country is increasingly strained, leading to conflicts, habitat loss, and threats to both human livelihoods and wildlife populations.

In some cases, climate change is shifting wildlife habitats, bringing them closer to people they hadn't been before.[6] A study by Sillero-Zubiri and Switzer reveals that climate change can drive conflicts by changing animal habits, timing of events, wildlife behaviours, and resource availability.[7] Thereby, people are changing behaviours and locations in response to climate change in ways that increase conflicts. Furthermore, during drought periods, ungulates spend most of their time near a limited number of water sources, and thus they are easily found and killed. When rain fills seasonal pools, lions disperse into their habitat, change their diets, and prey on easier targets.[8] This challenge encompasses issues such as human-wildlife conflict, poaching, and habitat degradation, which have far-reaching consequences for communities and the natural environment. Despite the government's response to the issue, several incidents involving the loss of people and cattle were reported and are reportedly getting worse. Lions and leopard attacks remain on the increase nationwide.[9]

The purpose of this paper is to shed light on a pressing issue and explore solutions. Through a comprehensive methodology that includes a literature review and analysis, this article aims to provide insights into the effects of human-wildlife conflict on human livelihood and survival in Zimbabwe and offer recommendations for addressing the human-wildlife conundrum. By examining the key aspects of the issue and evaluating existing efforts, this research aims to pave the way for a better understanding and effective action. The subsequent section will delve into the various dimensions of the conundrum, examine the current situation, and propose strategies for sustainable coexistence between humans and wildlife in Zimbabwe.

## LITERATURE REVIEW

Human-wildlife conflicts are a global problem that damages food destined for consumption and resale and disrupts food production, which leads to food insecurity. In many African countries, agriculture is the primary economic sector, producing both food and jobs. Farmers invest in their businesses by buying labor, equipment, and materials. The destruction of their crops is a huge loss that causes poverty and financial loss. Mekonen estimates that 10% to 15% of the agricultural output loss in Asia and Africa is

[2] Sefi Mekonen, "Coexistence between Human and Wildlife: The Nature, Causes and Mitigations of Human Wildlife Conflict around Bale Mountains National Park, Southeast Ethiopia," *BMC Ecology* 20, no. 1 (December 14, 2020): 51, https://doi.org/10.1186/s12898-020-00319-1.

[3] Peter Makumbe et al., "Human-Wildlife Conflict in Save Valley Conservancy: Residents' Attitude Toward Wildlife Conservation," *Scientifica* 2022 (April 28, 2022): 1–11, https://doi.org/10.1155/2022/2107711.

[4] Commonwealth of Australia, *A Duty of Care for the Protection of Diversity of the Land*, 2020, https://www.pc.gov.au/research/supporting/biodiversity-duty-of-care/docpobol.pdf.

[5] Given Matseketsa et al., "An Assessment of Human-Wildlife Conflicts in Local Communities Bordering the Western Part of Save Valley Conservancy, Zimbabwe," *Global Ecology and Conservation* 20 (October 2019): e00737, https://doi.org/10.1016/j.gecco.2019.e00737.

[6] Olga L Kupika et al., "Impacts of Climate Change and Climate Variability on Wildlife Resources in Southern Africa: Experience from Selected Protected Areas in Zimbabwe," *Selected Studies in Biodiversity*, 2017, 1–23.

[7] Claudio Sillero-Zubiri and David Switzer, "Crop Raiding Primates: Searching for Alternative, Humane Ways to Resolve Conflict with Farmers in Africa," *Wildlife Conservation Research Unit, Oxford University, Oxford*, 2001.

[8] Mekonen, "Coexistence between Human and Wildlife: The Nature, Causes and Mitigations of Human Wildlife Conflict around Bale Mountains National Park, Southeast Ethiopia."

[9] Aliénor Scrizzi et al., "Urban Human-Elephant Conflict in Zimbabwe: A Case Study of the Mitigation Endeavour," 2018.

attributable to elephants.[10] Food poverty is caused by plantations and fruit losses suffered by farmers because of forest degradation. Predation by elephants is thought to cause the loss of 1,000 hectares of crops in Mali each year.[11] Elephants destroying food stored in granaries and other food storage facilities can affect domestic food security.

Crop degradation affects communities because individuals neglect other crucial duties to safeguard the farms. Among these essential duties are gatherings with friends and family, gatherings of firewood and water, and spending the night observing fields. To safeguard their crops, farmers also cease working on development projects. Parents are being forced to keep their children home from school to protect the fields due to an increase in wildlife crop raiding, which has a detrimental effect on the development of the next generation. Makindi et al. note that malaria and other illnesses can strike farmers who watch crops at night.[12] Conflicts between humans and wildlife force farmers to spend some of their time monitoring fields rather than weeding or other actions that would increase the amount of area usable for cultivation. Fewer crop varieties will be developed as a result, which will result in low-quality food and malnutrition.[13]

A common indicator of prosperity and a source of income in many African nations is livestock. Families lose everything because of livestock depredation. According to Loveridge et al., between 2009 and 2013, wild animals in Zimbabwe's northwest region claimed the lives of 2,039 livestock and injured 309 more.[14] The milk and meat that livestock, like cattle, generate help to balance the diet. Malnutrition will result from livestock depredation and a poor diet. In organic farming, manure produced by livestock is also utilized. In this changing environment, where dry spells and droughts are prevalent because of climate change, livestock depredation will have a significant impact on agriculture. Transport, labor, and cultural purposes are just a few of the many applications for livestock in rural settings. The destruction of cattle by wild animals will have an impact on these applications. For instance, in Zimbabwe's traditional African religion, Bira rites involve the selection of an ancestral bull to serve as the grandpa *(Vasekuru)*. The entire family suffers greatly when these bulls are used for livestock depredation.

Indirect consequences of human-wildlife conflicts include health effects, opportunity costs, and international costs.[15] Conflicts between humans and wildlife lead to phobias and anxieties about the natural world, which will restrict travel and negatively affect people's quality of life. People will not be able to move and gather thatch grass, mushrooms, wild fruits, and sweeping broom grass while there is wildlife in the town. Osei Owusu claims that the elephant population in Zambia's Luangwa Valley harms livelihoods because it interferes with the gathering of Masau fruits, which are used as a dietary supplement.[16] Reduced sleep duration due to crop protection is one of the additional unintended consequences of human-wildlife interactions. This increases psychological stress and the risk of getting diseases like malaria.

The conservation of wild animals and their environments is impacted by unfavourable human-wildlife interactions. Due to retaliatory killings, poaching of wildlife and wood, habitat loss through arson fires, and persecution of wildlife animals, human-wildlife conflict has a negative impact on conservation. According to Utete et al., human-wildlife conflict caused farmers in Manjirenji to persecute and form retaliatory attacks against animals as a way of safeguarding their sources of livelihood.[17] Farmers who lose plantations, livestock, and crops due to human-wildlife conflict without receiving compensation have unfavourable views and opinions about protecting wildlife resources. Landowners, farmers, and wildlife managers intentionally kill certain wildlife creatures when they perceive them as a threat to their

[10] Mekonen, "Coexistence between Human and Wildlife: The Nature, Causes and Mitigations of Human Wildlife Conflict around Bale Mountains National Park, Southeast Ethiopia."
[11] FAO, *Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies*, 2009.
[12] Stanley M Makindi et al., "Human-Wildlife Conflicts: Causes and Mitigation Measures in Tsavo Conservation Area, Kenya," *International Journal of Science and Research* 3, no. 6 (2014): 1025–31.
[13] Kevin M. Dunham et al., "Human–Wildlife Conflict in Mozambique: A National Perspective, with Emphasis on Wildlife Attacks on Humans," *Oryx* 44, no. 2 (April 6, 2010): 185–93, https://doi.org/10.1017/S003060530999086X.
[14] Andrew J. Loveridge et al., "Bells, Bomas and Beefsteak: Complex Patterns of Human-Predator Conflict at the Wildlife-Agropastoral Interface in Zimbabwe," *PeerJ* 5 (January 24, 2017): e2898, https://doi.org/10.7717/peerj.2898.
[15] Makindi et al., "Human-Wildlife Conflicts: Causes and Mitigation Measures in Tsavo Conservation Area, Kenya."
[16] Y. Osei Owusu, "Human-Wildlife Conflict: Elephants-Farmer's Manual" (2018), http://hdl.handle.net/20.500.11822/26754.
[17] Beaven Utete et al., "Analysis of the Abundance and Spatial Distribution of the Common Hippopotamus, ( *Hippopotamus Amphibiu* s) in the Manjirenji Dam, Zimbabwe, to Inform Conservation and Detect Human–Wildlife Conflict Hot Spots," *African Journal of Ecology* 55, no. 4 (December 30, 2017): 754–59, https://doi.org/10.1111/aje.12407.

livelihoods. Three-quarters of respondents to a study of Uganda's Queen Elizabeth National Park believed that lions that roam through communities pose a hazard and should be eradicated.[18] According to Dunham et al., encounters between humans and wildlife lead to a drop in the acceptance and popularity of conservation.[19]

The effects and results of human-wildlife conflict, rather than just specific populations, may affect the whole habitat. The operation of ecosystems is impacted when keystone species are killed in the wild, which has a detrimental effect on wildlife resource conservation. Predator-prey oscillations, which occur when predators like lions are killed, can lead to an increase in the population of prey and vice versa, which is detrimental to conservation. The retaliatory killing of wildlife and the lethal management of human-wildlife conflicts harm the ecology. One consequence of these actions is the increase of mesopredators, which in turn leads to an increase in human-wildlife conflicts.[20]

## THEORETICAL FRAMEWORK

This research has chosen to incorporate the Integrated Musha/Nyumba theory and the Social Conflict Theory. The integrated Musha/Nyumba theory offers valuable perspectives on diverse social and cultural expectations throughout Africa. Taranhike developed an integrative theory called Musha/Nyumba.[21] This theory emphasizes the importance of the homestead as a multifaceted space that includes living in harmony with nature, being productive, learning about other cultures, and providing a place for the dead to rest. Musha encompasses various dimensions, including economic, social, spiritual, environmental, and humanistic aspects. The term "Musha" is derived from the Shona language and refers to a homestead, whereas "Nyumba" carries a similar meaning in the Swahili language.

According to Taranhike, this theory promotes Nyumba as a place for farming activities throughout the year.[22] The theory combines culture, community, technology, and enterprise. An integral musha or nyumba promotes household trade to enhance family livelihoods and helps create an active and vibrant village and regional economy.[23] It maintains the communal way of life and does not disrupt the African cultural social fabric because people do not move out of their community in search of employment. People live in harmony with nature, harvesting sunshine to produce solar energy, and harvesting both rainwater and underground water to ensure that farming is carried out throughout the year using drip irrigation, keeping bees for honey and pollination, and soil conservation.

Karl Marx, cited in Prayogi, developed the social conflict theory.[24] The theory posits that individuals in the community are based on unity, not conflict, and that conflict is inevitable where resources interlink. The theory explains that conflict results from interaction among two or more parties in a competitive setting. McGuiness notes that groups attain resources through conflict, and society is in a series of conflicts due to wrestling for resources; hence, people had to accept it as part of their lifestyle.[25] With food, water, and shelter needed as key resources for survival, the lack of these resources may result in the occurrence of conflict. Mekonen notes that human-wildlife conflict is a conflict between people and wildlife through agricultural field raids, livestock predation, or the killing of people.[26] The theory can be applied to explain the human-wildlife conflict in the area under investigation.

## METHODOLOGY

The research was qualitative. According to Sumeet Gulati et al., qualitative research produces findings not arrived at by means of quantification, for example, research about people's lives, stories, and

[18] FAO, *Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies*.
[19] Dunham et al., "Human–Wildlife Conflict in Mozambique: A National Perspective, with Emphasis on Wildlife Attacks on Humans."
[20] FAO, *Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies*.
[21] D. S. Taranhike, " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics" (Da Vinci University and TRANS4M Academy for Integral Transformation, 2021).
[22] Taranhike, " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics."
[23] Taranhike, " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics."
[24] Arditya Prayogi, "Social Change in Conflict Theory: A Descriptive Study," *ARRUS Journal of Social Sciences and Humanities* 3, no. 1 (April 11, 2023): 37–42, https://doi.org/10.35877/soshum1652.
[25] Shane Mc Guinness, "The Effects of Human-Wildlife Conflict on Conservation and Development: A Case Study of Volcanoes National Park, Northern Rwanda" (Trinity College, 2014).
[26] Mekonen, "Coexistence between Human and Wildlife: The Nature, Causes and Mitigations of Human Wildlife Conflict around Bale Mountains National Park, Southeast Ethiopia."

behaviours, among others.[27] The viewpoints, experiences, and feelings of the Doma people were thoroughly explored, thanks to qualitative research. It offered a deep and comprehensive knowledge of their attitudes, beliefs, and actions about conflicts between people and wildlife. The reason the researcher selected qualitative research is because it allowed them to explore the socio-cultural background of the Doma people and their experience in relation to human-wildlife conflict. The researchers further employed qualitative research methodologies because the relationship between people and wildlife is a complicated topic with numerous interconnected components. It is possible to examine this diversity because qualitative research captures the diverse viewpoints and experiences of the Doma people.

**Research Design**

The researcher utilized the case study design, focusing on Kanyemba Ward 1, Mbire District. Engel and Schutt define a case study as a method of investigation used in qualitative research whereby the researcher develops an in-depth analysis of a case, often a project, event, process, activity, individual, or group.[28] Mbire District is in the northern part of Zimbabwe. It borders Zambia from the north and Mozambique from the northeast. Major livelihoods for the community are crop farming, maize, cotton, sorghum, groundnuts, livestock husbandry, goats, cattle, chickens, sheep, and pigs.[29]

**Population and Sampling**

The researcher targeted the Doma people in the Kanyemba Mbire district, Ward 1. The Doma people are a minority group. According to Farrell, it is a hunter-gatherer community that has, for centuries, eked out a penurious existence on the margins of society.[30] Their tribe number is estimated to be 1500. A sample size of thirty-three participants was drawn from the Kanyemba Mbire district, Ward 1. Thirty male and female participants and three key informants Officers at Zimparks, Mbire RDC, and a Councillor from Ward 1. Non-probability sampling methods were utilized in this research. Non-probability sampling is a method that works hand in glove with the qualitative research method, which focuses on realistic events.[31] Purposive sampling was used to select the research participants and three key informants who have survived conflicts between humans and wildlife. Both male and female participants comprised the study's target demographic. According to Creswell and Creswell, purposive sampling is defined as a method where the researcher selects a sample, they feel will reflect the best information that satisfies the research objectives.[32]

**Data Collection Methods and Instruments**

Interviews were conducted using semi-structured interview guides. According to Abawi, in-depth interviews are one-on-one conversations that are semi-structured in nature and give participants room to explain further.[33] The respondents' information was gathered through in-depth interviews, which were conducted using standardized open-ended questions that gave the researcher more opportunity to elicit more details from the respondents. In-person interviews with people who have extremely knowledgeable opinions about a particular aspect of the program being evaluated are known as key informant interviews, according to Creswell and Creswell.[34] This local expertise helped in improving the study's findings' precision and applicability through sharing unique experiences and challenges faced by the Doma people.

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[27] Sumeet Gulati et al., "Human Casualties Are the Dominant Cost of Human–Wildlife Conflict in India," *Proceedings of the National Academy of Sciences* 118, no. 8 (February 23, 2021), https://doi.org/10.1073/pnas.1921338118.

[28] R.J Engel and R. K. Schutt, *The Practice of Research in Social Work* (London: Sage Publications, 2016).

[29] G Bola et al., "Coping with Droughts and Floods: A Case Study of Kanyemba, Mbire District, Zimbabwe," *Physics and Chemistry of the Earth, Parts A/B/C* 67 (2014): 180–86.

[30] H. B. McD Farrell, "The Two-Toed Wadoma-Familial Ectrodactyly in Zimbabwe," *South African Medical Journal* 65, no. 13 (1984): 531–33.

[31] John W Creswell and Cheryl N Poth, *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (Sage publications, 2016).

[32] J. W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* , 5th ed. (London: Sage, 2018).

[33] K. Abawi, *Training Course in Research Methodology and Research Protocol Development* (Geneva, Switzerland: Geneva Foundation for Medical Education and Research, 2018).

[34] Creswell and Creswell, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* .

**Data Analysis**

Thematic data analysis was used to analyze the data. Thematic analysis looks for, investigates, and summarizes recurrent patterns in the provided data.[35] The following are the six steps in the analysis process: familiarizing oneself with the data; developing draft codes; recognizing and assessing themes; defining and labelling themes; and, in the end, producing the report or article.[36] After the data was gathered, the following procedures were carried out:

- Sorting and placing the haphazard notes into written documents was the first stage.
- Using the recorded interviews, draft notes were made and then typed into a Word document. For the time being, the interviews were transcribed verbatim without any commentary.
- The transcription of each interview was often done in a diary, where each participant, the stated date of the interview, and the location of the interview were recorded using unique codes.
- The coding process was the next step. The data was rearranged before being categorized, as corresponding patterns and trends were found and noted in it. The code was written as a word or phrase, after which its importance to the study was elucidated.
- After the codes were assigned and allotted, the next step involved grouping and capturing them into smaller groups. Certain themes emerged from the data collection, which were subsequently rearranged and further categorized.
- Thoughts were recorded on paper, and summaries for every category were noted.
- Developing generalizations based on the findings was the last stage.

**PRESENTATION OF FINDINGS**

**Consequences and Effects of Human-Wildlife Conflict:**

Most respondents lamented the following issues, alleging that wild animals were to blame; that these creatures posed a threat to human safety by potentially killing or injuring people; destroying their crops; attacking their household pets; and disease transmission to their cattle and/or to them; and additional manifestations such as causing annoyances or property damage.

**Human safety risks**

Research participants noted that certain wildlife species, especially large and perhaps deadly creatures like bears, elephants, rhinoceroses, and big cats, pose a direct physical threat to human safety. The participants noted that there was a heightened risk of direct physical attacks from wildlife. The participants noted that elephants have the habit of charging at people if they sense danger or if something is keeping them from behaving in their natural manner. The participants noted that such cases are frequent and have become a threat to their children as they go to school daily to access education.

Below are some of the narratives from the participants:

> *"I heard the lion roaming outside my homestead. I realized that if I attempted to flee, it would maul me, so I paused. It hit me with its paws on the chest and on the ears. I used my feet to block its rear feet. I then grabbed a long pole, with which I hit him before he fled."*

Another participant had this to say:

> *"Our lives are at risk with these animals. The rate of occurrence of human-wildlife conflict has been on the rise, and our safety has been compromised. We do not know what to do anymore."*

Key Informant 1 had this to say:

> *"When wildlife populations coexist with populated areas, agricultural regions, or recreational areas, the risks might be very severe. The hazards to one's safety are further increased by the unpredictable nature of wildlife behavior and the possibility of encountering large, strong, or hostile creatures."*

[35] Michelle E Kiger and Lara Varpio, "Thematic Analysis of Qualitative Data: AMEE Guide No. 131," *Medical Teacher* 42, no. 8 (2020): 846–54.
[36] Kiger and Varpio, "Thematic Analysis of Qualitative Data: AMEE Guide No. 131."

**Competition for Limited Resources**

From the in-depth interviews that were conducted, competition for limited resources between humans and wildlife is a significant challenge in Mbire, Kanyemba Ward 1. This competition arises due to the overlapping needs and utilization of essential resources such as land, water, and food, which has resulted in limited food security due to the failure of sustainable agriculture. The competition for these resources has threatened the survival of wildlife in the district and the survival of the minority Doma, who survive on farming, hunting, and gathering. The study's participants assessed the fact that damage to crops and animals was a major issue brought on by conflicts between humans and wildlife. When wildlife like elephants, deer, and wild boars invaded agricultural regions, they seriously damaged cattle and crops, which ultimately resulted in a financial burden for the farmers.

Below are some of the narratives from the participants:

Key Informant 2:

> *"The unhealthy conflict in existence threatens the survival of the Doma People. Their crops are under attack as the animals wrestle to survive in the jungle."*

One of the participants had this to say:

> *"We are under attack from these elephants. Water points are running out, and our crops are under siege from elephants and warthogs."*

Another key informant remarked:

> *"Resources are now scarce, and this has been exacerbated by climate change in Zimbabwe. The animals and human beings are now competing for the few resources available, which has resulted in a threat to food security for the minority Doma people."*

**Conservation Challenge**

The participants in the study highlighted that human and wildlife conflicts pose a conservation challenge to the Doma community. Participants in the interview revealed that the killing of wildlife was a result of human-wildlife confrontations and that this prompted the Doma people to kill animals in retaliation or hunt them illegally for troublesome species. The participants noted that humans kill and chase wild animals by digging, cutting, sealing stones, and smoking their natural habitat, which is slowly leading to the decrease and extinction of wild animals, seriously threatening the preservation of biodiversity. The participants noted that this has also been necessitated by the continuous increase of new settlements, which is minimizing the feeding ground for the animals.

One of the study's participants reported that:

> *"Public support for wildlife conservation activities was diminished by conflicts between humans and wildlife. Communities lost support for conservation initiatives and participation in conservation programs as they saw animals as a threat to their agriculture, livelihoods, or safety. Effective conservation measures were hampered in their execution, and this presented difficulties for conservation organizations."*

One of the key informants had this to say:

> *"Human interests may be pressured to take precedence over conservation when wildlife poses a threat to human safety or prosperity. This may result in the application of ad hoc, non-sustainable remedies, like the indiscriminate slaughter or eradication of troublesome wildlife, which could be detrimental to ecosystems and biodiversity. This makes environmentalists' efforts to save habitats and the creatures that inhabit them even more difficult."*

**Disruption of Ecosystem Balance**

The participants stated that prey species like impalas and zebras saw unregulated population growth because of the Doma people's eradication or reduction of predator numbers in Kanyemba Ward 1. The resultant overgrazing and vegetation loss had a major effect on the resources available to other herbivores such as their cattle and goats, which form part of their main livelihood. The region's general ecological balance was upset by the imbalance brought on by the overabundance of herbivores. It changed vegetation

dynamics, impacted plant species diversity and abundance, and had a domino effect on other ecosystem organisms. The participant had this to say:

> *"The disruption in the ecological balance caused by the overabundance of herbivores has had far-reaching effects. The changes in vegetation dynamics, including reduced plant species diversity and abundance, have had a domino effect on the Doma people who keep in stock their cattle and goats."*

The participant alluded that:

> *"Ecological balance was upset by the imbalance brought on by the overabundance of herbivores."*

A key informant also had this to say:

> *"The reduction of predator numbers by the Doma people in Kanyemba ward led to unregulated population growth among prey species such as impalas and zebras. This population increase resulted in overgrazing and vegetation loss, significantly affecting the availability of resources for other herbivores. The imbalance caused by the overabundance of herbivores disrupted the general ecological balance in the region. This disruption altered vegetation dynamics, impacting plant species diversity and abundance, and subsequently had a cascading effect on other organisms within the ecosystem."*

## DISCUSSION

The results highlight the possibility of serious effects from human-wildlife interactions, including harm, auto accidents, and the spread of illness, especially when humans interfere with or disturb the animals' normal habitats or behaviour. There are more risks involved in these interactions when large or aggressive species are present given the connection and interactions between humans and their environment. In terms of land, the expansion of human populations leads to encroachment upon natural habitats, reducing available land for wildlife and forcing wildlife to visit and cross through their homes. As clearly highlighted by the Social Conflict Theory, conflict results from interaction among two or more parties in a competitive setting due to wrestling for resources, hence people had to accept the human-wildlife conflict as part of their lifestyle. Competition over food resources can fuel hostility towards wildlife and result in retaliatory actions that negatively affect both wildlife populations and human livelihoods.

Livestock depredation and crop damage can trigger retaliatory actions from livestock owners. When wildlife species like elephants, deer, wild boars, or rats invade agricultural regions, they cause substantial destruction to agricultural infrastructure, including fences and irrigation systems, trample fields, and plunder crops. To protect their animals and mitigate further losses, farmers may resort to aggressive measures such as hunting, poisoning, or trapping wildlife. With farming being a key livelihood strategy for the Doma people, they do whatever it takes to safeguard their survival. Taranhike notes that the Musha theory clearly highlights how farming is a vital cog for the livelihood of rural inhabitants.[37] These actions can lead to harm or the loss of animal lives, and they can escalate conflicts between humans and wildlife. The findings also made it clear that when farmers perceived wildlife as a threat to their livestock and livelihoods, it created tension and animosity. Utete et al. have noted that human-wildlife conflict has resulted in Manjirenji farmers forming retaliation attacks against animals as a way of safeguarding their sources of livelihood.[38] Conversely, wildlife may attack livestock because of habitat loss, competition for resources, or other factors. However, it is important to note that these reactive approaches escalate conflicts and pose a threat to the long-term conservation of wildlife populations, further intensifying confrontations between humans and wildlife.[39]

The presented results are consistent with Musha/Nyumba Theory, which highlights the interconnectedness and dynamics of individuals, and communities, living in harmony with nature, being productive and the surroundings.[40] Underlying elements contributing to human-wildlife conflicts in agricultural zones include rivalry for resources, encroachment of habitat, and attractiveness of food

[37] Taranhike, " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics."
[38] Utete et al., "Analysis of the Abundance and Spatial Distribution of the Common Hippopotamus, ( *Hippopotamus Amphibiu* s) in the Manjirenji Dam, Zimbabwe, to Inform Conservation and Detect Human–Wildlife Conflict Hot Spots."
[39] Makindi et al., "Human-Wildlife Conflicts: Causes and Mitigation Measures in Tsavo Conservation Area, Kenya."
[40] Taranhike, " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics."

sources, according to the hypothesis. This interconnectedness has resulted in farmers suffering financial losses and economic problems because of wildlife damaging agricultural infrastructure and crops, upsetting the natural equilibrium and their way of life. These actions endanger wildlife populations' long-term conservation, in addition to escalating confrontations. This emphasizes how crucial it is to solve human-wildlife conflicts while taking into the broader ecological implications and repercussions account. Proactive and sustainable solutions that consider the interconnection of the natural system are required to effectively handle these problems and foster coexistence. This entails putting in place strong deterrents to safeguard agricultural regions, looking into alternate sources of income for farmers, encouraging sustainable land management techniques to lessen habitat degradation, and spreading awareness of the value of coexisting and conserving wildlife. Finding sustainable solutions that preserve the ecological balance while safeguarding wildlife populations and human livelihoods can be accomplished by taking a comprehensive approach.

The above analysis made it clear that the analysis reveals that the overabundance of herbivores has had significant and far-reaching effects on the ecological balance. The disruption caused by the excessive herbivore populations has led to changes in vegetation dynamics, resulting in reduced plant species diversity and abundance. These changes have had a domino effect on other organisms within the ecosystem, potentially affecting the entire food web and ecosystem functioning. The imbalance brought on by the overabundance of herbivores upsets ecological equilibrium, emphasizing the importance of maintaining a balanced predator-prey relationship to sustain ecosystem health and stability.

**Implications for Social Work Practice**

Human-wildlife conflict has significant psychological and emotional impacts on individuals and communities. As highlighted from the study, human-wildlife conflict has resulted in loss of life and loss of livelihood; Social workers therefore need to adopt trauma-informed approaches when working with those affected by such conflicts. With effects not limited to mass deaths, huge economic costs, unavailability of safety assurance, and dwindling of critical resources, there is a need for the provision of a safe and supportive environment and offering appropriate interventions to address the emotional well-being and resilience of individuals and communities impacted by the conflict.

Based on the research findings, social workers can advocate for policy changes and development that address the effects of human-wildlife conflict. Whilst the Parks and Wildlife Act Chapter 20:14, ensures protection for domestic and endangered animals, there is a need to ensure insurance and compensation of affected human beings. Social Workers can collaborate with policymakers, conservation organizations, and community groups to promote policies that balance the needs of both humans and wildlife. Social workers can also advocate for the inclusion of community perspectives and experiences in policy discussions and decision-making processes. The research can guide social workers in engaging with communities affected by human-wildlife conflict. Social workers can facilitate community discussions, workshops, and participatory processes to empower community members to voice their concerns, needs, and ideas. This approach ensures that interventions are community-driven and reflect the unique context and experiences of those affected.

Human-wildlife conflict often involves tensions and disputes between different stakeholder groups, such as farmers, conservationists, and local communities. Social workers can apply conflict resolution and mediation skills to facilitate dialogue and negotiation among these groups. By fostering understanding, empathy, and collaborative problem-solving, social workers can help find mutually beneficial solutions that address the concerns of all stakeholders involved. Social workers can support the development and implementation of sustainable livelihood projects and economic opportunities that reduce communities' dependence on resources that may attract wildlife. Social workers can play a role in capacity-building and education initiatives that increase awareness and knowledge about human-wildlife conflict. They can collaborate with local schools, community organizations, and government agencies to develop educational programs that promote coexistence and responsible behavior toward wildlife. By providing training and resources, social workers can empower individuals and communities to mitigate conflict through preventive measures and appropriate responses.

**Discussion Summary**

The study arrived at the following suppositions based on the research findings. The study was able to present the devastating consequences and effects of human-wildlife conflict. The study found that human-wildlife conflict often results in posing a threat to human safety by potentially killing or injuring people and destroying their crops and livestock. The study also unearthed that the continuous human-wildlife conflict has ultimately resulted in conversation challenges, competition for limited resources, and destruction of the ecosystem balance. The study also noted a call to social work intervention with an urgent need to develop and implement sustainable livelihood projects and economic opportunities that reduce communities' dependence on resources that may attract wildlife.

## RECOMMENDATIONS

- **ZimParks and Wildlife Management:** Zimbabwe Parks and Wildlife Management Authority to give precedence to community involvement and incorporate the Doma community into decision-making procedures concerning the conservation and management of wildlife.
- **Government:** The need to review the Parks and Wildlife Management Act chapter 20:14 ensures protection for domestic and endangered animals, there is a need to ensure insurance and compensation of affected human beings.
- **Government**: To develop early warning systems to prevent and manage the potential hazards of human-wildlife conflict. The government to put into practice sensible land-use planning to reduce conflict areas between people and wildlife and strengthen wildlife management and conservation efforts, such as habitat restoration and protection.
- **Government:** Encouraging advancement of technology and infrastructural development to reduce conflicts between people and wildlife. To safeguard animals, crops, and populated areas, this can involve erecting sturdy fences, setting up early warning systems, and advocating for creative deterrent strategies.
- **Stakeholders:** The is a need for different stakeholders to come together and champion the development of insurance schemes as a social security measure against the potential hazard of human-wildlife conflict.
- **Doma People:** Doma people are urged to adopt preventative measures to enhance personal safety and security in areas where conflicts between humans and wildlife are likely to occur. For example, securing animal enclosures, building sturdy fences around homesteads, and devising plans to keep wildlife away from populated areas can all help achieve this.
- **Doma People:** The need to educate the Doma people on sustainable wildlife management of wildlife species such as all land users within the wildlife habitat being aware of and considering the effects of their activities on the wildlife resources and habitat.
- **Future Research**: Multi-case study enables the examination of many perspectives and experiences within human-wildlife conflict. By highlighting the variations in conflict situations, it advances a deeper comprehension of the disputes that arise between people and wildlife.

## CONCLUSION

This article using the Integrated Musha/Nyumba, and the Social Conflict theory analysed the human-wildlife conundrum in Zimbabwe and its implications for Social Work Practice. The article. The article revealed that the existence of human-wildlife conflict has significantly impacted the local livelihoods of the rural populace in Mbire District. With climate change having modified agricultural practices and land use, the result has been competition for resources and higher chances for conflict. The study revealed that consequences of human-wildlife conflicts include competition for resources, a threat to human safety, crop and livestock damage, conservation concerns and disruption of ecosystem balance. The paper concluded that human-wildlife conflict is a serious global threat to sustainable development, food security, wildlife conversation, and health, a concern that is negatively affecting both people and wildlife. With the lion’s share of Zimbabwe’s community occupied by agricultural activities, the existence of human-wildlife conflict hinders the achievement of many of the Sustainable Development Goals (SDGs) such as ending poverty in all forms and ending hunger, achieving food security, improved nutrition and promoting

sustainable agriculture. The authors have made various evidence-based recommendations to policymakers and stakeholders, including education initiatives, compensation and insurance schemes, land use planning, community engagement, and the development of early warning systems.

## CONFLICT OF INTEREST

The authors declared no conflict of interest.

## BIBLIOGRAPHY


Abawi, K. *Training Course in Research Methodology and Research Protocol Development*. Geneva, Switzerland: Geneva Foundation for Medical Education and Research, 2018.

Bola, G, C Mabiza, J Goldin, K Kujinga, I Nhapi, H Makurira, and D Mashauri. "Coping with Droughts and Floods: A Case Study of Kanyemba, Mbire District, Zimbabwe." *Physics and Chemistry of the Earth, Parts A/B/C* 67 (2014): 180–86.

Commonwealth of Australia. *A Duty of Care for the Protection of Diversity of the Land*, 2020. https://www.pc.gov.au/research/supporting/biodiversity-duty-of-care/docpobol.pdf.

Creswell, J. W., and J. D. Creswell. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* . 5th ed. London: Sage, 2018.

Creswell, John W, and Cheryl N Poth. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Sage publications, 2016.

Dunham, Kevin M., Andrea Ghiurghi, Rezia Cumbi, and Ferdinando Urbano. "Human–Wildlife Conflict in Mozambique: A National Perspective, with Emphasis on Wildlife Attacks on Humans." *Oryx* 44, no. 2 (April 6, 2010): 185–93. https://doi.org/10.1017/S003060530999086X.

Engel, R.J, and R. K. Schutt. *The Practice of Research in Social Work*. London: Sage Publications, 2016.

FAO. *Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies*, 2009.

Farrell, H B McD. "The Two-Toed Wadoma-Familial Ectrodactyly in Zimbabwe." *South African Medical Journal* 65, no. 13 (1984): 531–33.

Gulati, Sumeet, Krithi K. Karanth, Nguyet Anh Le, and Frederik Noack. "Human Casualties Are the Dominant Cost of Human–Wildlife Conflict in India." *Proceedings of the National Academy of Sciences* 118, no. 8 (February 23, 2021). https://doi.org/10.1073/pnas.1921338118.

IUCN SSC. "What Is Human-Wildlife Conflict." *Briefing Paper by the IUCN SSC Human-Wildlife Conflict Task Force*, 2020.

Kiger, Michelle E, and Lara Varpio. "Thematic Analysis of Qualitative Data: AMEE Guide No. 131." *Medical Teacher* 42, no. 8 (2020): 846–54.

Kupika, Olga L, Edson Gandiwa, Shakkie Kativu, and Godwell Nhamo. "Impacts of Climate Change and Climate Variability on Wildlife Resources in Southern Africa: Experience from Selected Protected Areas in Zimbabwe." *Selected Studies in Biodiversity*, 2017, 1–23.

Loveridge, Andrew J., Timothy Kuiper, Roger H. Parry, Lovemore Sibanda, Jane Hunt Hunt, Brent Stapelkamp, Lovelater Sebele, and David W. Macdonald. "Bells, Bomas and Beefsteak: Complex Patterns of Human-Predator Conflict at the Wildlife-Agropastoral Interface in Zimbabwe." *PeerJ* 5 (January 24, 2017): e2898. https://doi.org/10.7717/peerj.2898.

Makindi, Stanley M, Mark N Mutinda, Nicholas K W Olekaikai, Wilson L Olelebo, and Abdillahi A Aboud. "Human-Wildlife Conflicts: Causes and Mitigation Measures in Tsavo Conservation Area, Kenya." *International Journal of Science and Research* 3, no. 6 (2014): 1025–31.

Makumbe, Peter, Stenly Mapurazi, Sostina Jaravani, and Isaac Matsilele. "Human-Wildlife Conflict in Save Valley Conservancy: Residents' Attitude Toward Wildlife Conservation." *Scientifica* 2022 (April 28, 2022): 1–11. https://doi.org/10.1155/2022/2107711.

Matseketsa, Given, Never Muboko, Edson Gandiwa, Davidson M. Kombora, and Gladman Chibememe. "An Assessment of Human-Wildlife Conflicts in Local Communities Bordering the Western Part of Save Valley Conservancy, Zimbabwe." *Global Ecology and Conservation* 20 (October 2019): e00737. https://doi.org/10.1016/j.gecco.2019.e00737.

Mc Guinness, Shane. "The Effects of Human-Wildlife Conflict on Conservation and Development: A Case Study of Volcanoes National Park, Northern Rwanda." Trinity College, 2014.

Mekonen, Sefi. "Coexistence between Human and Wildlife: The Nature, Causes and Mitigations of Human Wildlife Conflict around Bale Mountains National Park, Southeast Ethiopia." *BMC Ecology* 20, no. 1 (December 14, 2020): 51. https://doi.org/10.1186/s12898-020-00319-1.

Osei Owusu, Y. "Human-Wildlife Conflict: Elephants-Farmer's Manual," 2018. http://hdl.handle.net/20.500.11822/26754.

Prayogi, Arditya. "Social Change in Conflict Theory: A Descriptive Study." *ARRUS Journal of Social Sciences and Humanities* 3, no. 1 (April 11, 2023): 37–42. https://doi.org/10.35877/soshum1652.

Scrizzi, Aliénor, Sébastien Le Bel, Mike La Grange, Daniel Cornélis, Cheryl Tinashe Mabika, and René Czudek. "Urban Human-Elephant Conflict in Zimbabwe: A Case Study of the Mitigation Endeavour," 2018.

Sillero-Zubiri, Claudio, and David Switzer. "Crop Raiding Primates: Searching for Alternative, Humane Ways to Resolve Conflict with Farmers in Africa." *Wildlife Conservation Research Unit, Oxford University, Oxford*, 2001.

Taranhike, D. S. " Integral Kumusha: A Case of Buhera – Towards Self-Sufficiency in Zimbabwe via Nhakanomics." Da Vinci University and TRANS4M Academy for Integral Transformation, 2021.

Utete, Beaven, Joshua Tsamba, Exeverino Chinoitezvi, and Blessing Kavhu. "Analysis of the Abundance and Spatial Distribution of the Common Hippopotamus, ( *Hippopotamus Amphibiu* s) in the Manjirenji Dam, Zimbabwe, to Inform Conservation and Detect Human–Wildlife Conflict Hot Spots." *African Journal of Ecology* 55, no. 4 (December 30, 2017): 754–59. https://doi.org/10.1111/aje.12407.

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