

NGENANI

THE ZIMBABWE EZEKIEL GUTI UNIVERSITY JOURNAL OF COMMUNITY ENGAGEMENT AND SOCIETAL TRANSFORMATION

ISSN 2957-8558 (Print) ISSN 3007-2212 (Online)

Vol. 3 Issues (18.2), 2024

©ZEGU Press 2024

Published by the Zimbabwe Ezekiel Guti University Press Stand No. 1901 Barrassie Rd, Off Shamva Road Box 350, Bindura, Zimbabwe

All rights reserved.

"DISCLAIMER: The views and opinions expressed in this journal are those of the scholars and do not necessarily reflect the official position of funding partners"

Typeset by Divine Graphics Printed by Divine Graphics

EDITOR-IN-CHIEF

Dr Kwashirai Zvokuomba, Zimbabwe Ezekiel Guti University, Zimbabwe

MANAGING EDITOR

Dr Kwashirai Zvokuomba, Zimbabwe Ezekiel Guti University, Zimbabwe

EDITORIAL ADVISORY BOARD

Professor Bernard Chazovachii, Great Zimbabwe University, Zimbabwe Dr Tebeth Masunda, University of Zimbabwe, Zimbabwe Dr Benjamin Gweru, University of Zimbabwe, Zimbabwe Dr Getrude D Gwenzi, University of Zimbabwe, Zimbabwe Professor Average Chigwenya, National University of Science and Technology, Zimbabwe Dr Brenda Muchabveyo, University of Zimbabwe, Zimbabwe

SUBSCRIPTION AND RATES

Zimbabwe Ezekiel Guti University Press Office Stand No. 1901 Barrassie Rd, Off Shamva Road Box 350, Bindura, Zimbabwe Telephone: ++263 8 677 006 136 | +263 779 279 912 E-mail: zegupress@admin.uz.ac.zw http://www.zegu.ac.zw/press

About the Journal

JOURNAL PURPOSE

The purpose of the *Ngenani* - *Zimbabwe Ezekiel Guti University Journal of Community Engagement and Societal Transformation Review and Advancement,* is to provide a forum for community engagement and outreach.

CONTRIBUTION AND READERSHIP

Sociologists, demographers, psychologists, development experts, planners, social workers, social engineers and economists, among others whose focus is on community development.

JOURNAL SPECIFICATIONS

Ngenani - Zimbabwe Ezekiel Guti University Journal of Community Engagement and Societal Transformation Review and Advancement

ISSN 2957-8558(Print) ISSN 3007-2212 (Online)

SCOPE AND FOCUS

The journal is a forum for the discussion of ideas, scholarly opinions and case studies of community outreach and engagement. Communities are both defined in terms of people found in a given locale and defined cohorts, like the children, the youth, the elderly and those living with a disability. The strongest view is that getting to know each community or subcommunity is a function of their deliberate participation in matters affecting them by the community itself. The journal is produced bi-annually.

Guidelines for Scholars for the Journal

Articles must be original contributions, not previously published and should not be under consideration for publishing elsewhere.

Manuscript Submission: Articles submitted to the *Ngenani - Zimbabwe Ezekiel Guti University Journal of Community Engagement and Societal Transformation* are reviewed using the double-blind peer review system. The author's name(s) must not be included in the main text or running heads and footers.

A total number of words: 5000-7000 words and set in 12-point font size width with 1.5 line spacing.

Language: British/UK English

Title: must capture the gist and scope of the article

Names of scholars: beginning with the first name and ending with the surname

Affiliation of scholars: must be footnoted, showing the department and institution or organisation.

Abstract: must be 200 words

Keywords: must be five or six containing words that are not in the title **Body**: Where the scholars are more than three, use *et al.*,

Italicise *et al., ibid.,* words that are not English, not names of people or organisations, etc. When you use several scholars confirming the same point, state the point and bracket them in one bracket and ascending order of dates and alphabetically separated by semi-colon e.g. (Falkenmark, 1989, 1990; Reddy, 2002; Dagdeviren and Robertson, 2011; Jacobsen *et al.*, 2012).

Referencing Style: Please follow the Harvard referencing style in that:

– In-text, citations should state the author, date and sometimes the page numbers.

 The reference list entered alphabetically, must include all the works cited in the article.

In the reference list, use the following guidelines, religiously:

Source from a Journal

Anim, D.O and Ofori-Asenso, R (2020). Water Scarcity and COVID-19 in Sub-Saharan Africa. *The Journal of Infection*, *81*(2), 108-09.

Banana, E, Chitekwe-Biti, B and Walnycki, A (2015). Co-Producing Inclusive City-Wide Sanitation Strategies: Lessons from Chinhoyi, Zimbabwe. *Environment and Urbanisation*, 27(1), 35-54.

Neal, M.J. (2020). COVID-19 and Water Resources Management: Reframing Our Priorities as a Water Sector. *Water International*, 45(5), 435-440.

Source from an Online Link

Armitage, N, Fisher-Jeffes L, Carden K, Winter K *et al.* (2014). Water Research Commission: Water-sensitive Urban Design (WSUD) for South Africa: Framework and Guidelines. Available online: https://www.greencape.co.za/assets/Water-Sector-Desk-Content/WRC-Water-sensitive-urban-design-WSUD-for-South-Africa-framework-and-guidelines-2014.pdf. Accessed on 23 July 2020.

Source from a Published Book

Max-Neef, M. (1991). *Human Scale Development: Concepts, Applications and Further Reflections,* London: Apex Press.

Source from a Government Department (Reports or Plans)

National Water Commission (2004). Intergovernmental Agreement on a National Water Initiative. Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory. Available online: https://www.pc.gov.au/inquiries/completed/water-reform/national-water-initiative-agreement-2004.pdf. Accessed

on 27 June 2020.

The source being an online Newspaper article

The Herald (2020). Harare City Could Have Used Lockdown to Clean Mbare Market. *The Herald*, 14 April 2020. Available online: https://www.herald.co.zw/harare-city-could-have-used-lockdown-to-clean-mbare-market/. Accessed on 24 June 2020.

UNLEASHING THE POTENTIAL OF COMMUNITY PARTICIPATION IN WILDLIFE MANAGEMENT IN THE DRIVE OF **EMPOWERING CONSERVATION:** Α CASE STUDY OF VICTORIA FALLS PRIVATE GAME **RESERVE, ZIMBABWE**

EVANS BONJISI TEMBO¹, EUGENIA MUCHINI², REASON CHANGARA³ AND EDWARD TSHUMA⁴

Abstract

This study critically explores the role of community participation in enhancing sustainable wildlife management at Victoria Falls Private Game Reserve. The research was prompted by increasing conservation challenges within the game reserve, including, but not limited to: poaching, habitat degradation, human-wildlife conflicts and a threatened tourism business (Dube, 2019; Matseketsa et al., 2019; Ntuli et al., 2019). The study employed a mixed methods approach underpinned by a pragmatic research philosophy. A cross-sectional descriptive survey research design was utilised. The target population consisted of 600 subjects, including game reserve staff, community members and officials from government and non-governmental wildlife management authorities in Zimbabwe. Data were collected through questionnaires (n=60) and key informant interviews (n=6). Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) version 23.0, while qualitative data were

¹ Department of Research and Development, Police Staff College, 0773299297, ebtembo@gmail.com orcid 0009000351908553

² Department of Research and Development, Police Staff College, Harare, Zimbabwe, https://orcid.org/0009-0007-0251-3669

³ Department of Research and Development, Police Staff College, Harare, Zimbabwe, https://orcid.org/0009-0003-7688-739X

⁴ Department of Research and Development, Police Staff College, Harare, Zimbabwe, https://orcid.org/0009-0005-0778-4869

analysed using thematic analysis. Research results reveal that community participation initiatives have a positive and significant influence on wildlife conservation at Victoria Falls Private Game Reserve. The study also identified challenges hindering effective community participation in wildlife management, including lack of access to information and limited financial incentives. Strategies proposed to enhance community participation in wildlife conservation include community engagement and incentivizing conservation efforts. Therefore, the study recommends that game reserves ensure local communities have representation on committees related to wildlife management. This would provide them with a platform to voice their concerns and actively participate in wildlife conservation and management.

Keywords: *poaching, community, wildlife, conservation, sustainability, natural-ecosystem.*

INTRODUCTION AND REVIEW OF LITERATURE

The idea of community participation is ideological in orientation, reflecting beliefs derived from social and political theories on how societies should be organised and how development should occur (Tosun, 2000). As observed by Vimal *et al.* (2018), there is a lack of a universally accepted and mutually understood definition of community participation in the field of conservation studies. Paul (1987) conceptualises community participation as the collective action of people working in groups to exert influence on the course and results of development initiatives that will impact them. In this study, community participation in wildlife management refers to the active involvement of local communities in decision-making processes and actions related to the conservation and management of wildlife. This includes participation in the planning, implementation and monitoring of conservation activities.

The concept of community participation is rooted in the belief that local communities possess valuable familiarity, as expressed in the Shona proverb "*Muzivi wenzira yeparuware ndiye mufambi wayo*", loosely rendered in English as, the one who knows the road is the one who uses it regularly. Unfortunately, many studies conducted within the Zimbabwean ecosystem have not adequately emphasized this aspect, particularly concerning private game reserves. In the context of Indonesia, Timothy (2019) argues that while there are theoretical efforts to educate local residents and involve them in the economic benefits of wildlife management and tourism, such participation has not been recognised as important in planning documents or effectively implemented, except in a few isolated cases.

In the interest of sustainable development, Goal 15 of the Sustainable Development Goals (SDGs) 2030 Agenda emphasizes the need for urgent action to end poaching and trafficking of protected species of flora and fauna, addressing both the demand and supply of illegal wildlife products. To achieve this, a fundamental shift in perspective is necessary towards the sustainable management of natural resources based on ecosystems. This new approach emphasizes the active involvement of individuals residing and working in and around protected areas (PAs) in the decision-making process. This inclusive paradigm is essential for the long-term success of PAs, as highlighted by Stellmacher *et al.* (2012) in Tarimo and Olotu (2020). Consequently, adopting a participatory approach becomes imperative, enabling local communities to actively participate in decision-making processes and ensuring they derive sustainable benefits from wildlife conservation (Wilfred, 2010; Tarimo and Olotu, 2020).

Victoria Falls, a tourism resort district in Zimbabwe, has experienced significant impacts from environmental changes. The district has witnessed an influx of people migrating from neighbouring countries,

66

urban areas and other districts in search of survival, drawn by previously untapped natural resources such as land and wildlife (Machamacha *et al.*, 2011). The local population in the district has traditionally relied on the exploitation of wildlife resources for their livelihoods. However, due to worsening economic problems, this exploitation has become excessive and reckless, resulting in environmental changes that have negatively impacted the district's resources and strategies for sustaining livelihoods.

On one hand, poaching activities have harmed wildlife and severely damaged tourism development. On the other hand, living standards have declined and the efforts made by the government and other stakeholders to improve the quality of life in the district demonstrate a lack of understanding of the detrimental effects of environmental changes on rural livelihoods (Mapira, 2018; Dube and Nhamo, 2020). This ongoing conflict has eroded social cohesion and transformed local communities into zones of lawlessness and impunity. Consequently, this situation has motivated the current research to investigate the role of community participation in wildlife management in Victoria Falls Private Game Reserve.

Victoria Falls Private Game Reserve, located in the vicinity of the iconic Victoria Falls in Zimbabwe, serves as an invaluable case study for exploring the potential of community participation in wildlife management. The game reserve, spanning 2,500 hectares, is situated 12km away from Victoria Falls and shares a border with the Zambezi National Park that covers an area of 56,000 hectares. The entire reserve is enclosed by a fence and serves as a habitat for the "big five" animals: lion, leopard, elephant, buffalo and rhinoceros.

Nevertheless, instances of crop damage, livestock predation, human injuries and even loss of human life attributed to troublesome animals at Victoria Falls have also been reported (Matseketsa *et al.*, 2019; Ntuli *et al.*, 2019; Mogomotsi *et al.*, 2020). Thus, the game reserve is not spared from these numerous conservation challenges. Therefore, by investigating the role of community participation in addressing these and other challenges, this research paper seeks to contribute to the existing body of knowledge on sustainable conservation practices.

ROLE OF COMMUNITY PARTICIPATION IN WILDLIFE CONSERVATION

growing understanding that addressing There is а global environmental issues like climate change and land degradation requires a holistic approach, as these processes have intricate interactions with one another (Reed and Stringer, 2016). In Mali, the role of community participation in wildlife conservation and management has yielded fruitful results within the Diaban Basin of the Sikasso Region. The hunters of the region have now become the guardians of the wildlife, actively protecting a 1020-hectare conservation area, that is a fully preserved forest and ensuring compliance with conservation rules (Kaba, 2007). The hunters, youth and women have collectively constructed firebreaks and salt stations for the wildlife in the forest (Kaba, 2007). Recognising the importance of preserving their hunting culture, the village chiefs and hunters sought financial and technical support for their project, with the backing of the mayor and expatriates (Kaba, 2007; Isiugo and Obioha, 2015). Similarly, Noe and Kangalawe (2015) observe how traditional ecological knowledge, customary land and resource management systems and self-governing institutions of indigenous peoples contribute significantly to conservation efforts.

Tarimo and Olotu (2020) contend that the role of local communities in sharing confidential wildlife crime-related information, that enabled the game reserve management to arrest poachers and confiscate numerous weapons. They also revealed that the game reserve management had received a significant amount of information about the damages caused by problematic and dangerous animals, such as lions, leopards and elephants (Tarimo and Olotu, 2020).

In Botswana, the approach followed in pursuit of wildlife conservation and management through community participation includes the formation of Representative and Accountable Legal Entities (RALEs) and the establishment of guidelines and principles (at the community level) for the management and utilisation of resources (Dikobe and Thakadu, 2019). These RALEs grant community members greater rights of control, management and utilisation of wildlife resources through participatory processes. The underlying concept behind this approach is to encourage communities to manage wildlife sustainably by transferring, in part, management responsibility, decision-making processes and benefits of utilisation (Dikobe and Thakadu, 2019). However, wildlife conservation projects can fail if policymakers do not take the local community's opinions into account, as evidenced by the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) programme in Zimbabwe (Ntuli, 2019).

Furthermore, the role of community participation through lobbying for policies that support conservation and protect community members' interests in the conservation and management of wildlife resources is captured by the Wildlife Policy of Tanzania (WPT) of 1998. The WPT emphasizes community participation in wildlife protection and utilisation, with one of its objectives being to ensure that local communities obtain substantial and tangible benefits from wildlife conservation (Wilfred, 2010).

More importantly, community-based initiatives in the management and utilisation of natural resources need to be closely associated with the needs of the community. These needs, in practice, have ranged from poverty alleviation, power, cultural satisfaction, to secure tenure and proprietorship. Therefore, meeting the immediate needs of community members provides incentives (Kipkeu *et al.*, 2014) that link the conservation of resources with their basic survival. For example, the utilisation of wildlife quotas has addressed the need for cash-based income in Botswana, providing an incentive for conserving the species in question for the enhancement of quotas in subsequent hunting seasons (Dikobe and Thakadu, 2019). However, despite the crucial role of community participation in wildlife conservation, literature reveals several challenges constraining such participation across the globe (Hansen *et al.*, 2015; Bello *et al.*, 2017; Mogomotsi *et al.*, 2020).

COMMUNITY PARTICIPATION CHALLENGES IN WILDLIFE MANAGEMENT

Hansen *et al.* (2015) aver that realising "win-win" outcomes and minimising trade-offs between environmental and community socioeconomic development remains a challenge. Ayivor *et al.* (2014), as cited in Mahlangabeza and Zwelakhe (2021), argue that human-wildlife conflict is usually understood as generating strong opposition from already frustrated people who believe that these destructive animals are more valued than their existence. Similarly, Bello *et al.* (2017) assert that local communities around protected areas are often antagonistic towards government officials and park management following instances of wildlife destroying their crops or property, or injuring or killing people.

Furthermore, a lack of education and awareness about environmental issues leads to communities rejecting wildlife conservation (Mogomotsi *et al.*, 2020). Supporting this view, Tosun (2000) and Bello *et al.* (2017) highlight that many local people in developing countries lack information on tourism and wildlife conservation, as there is often insufficient conservation data and the available information is disseminated to the public in incomprehensible forms. This ultimately

makes the implementation of community participation initiatives ineffective (Bello *et al.*, 2017). In essence, a lack of education and awareness influences people's attitudes, leading them to believe that governments and conservationists are more concerned about wildlife than human welfare (Mir *et al.*, 2015).

Tosun (2000) asserts that many developing countries lack appropriate legal and regulatory systems that support and defend the interests of local communities and ensure their involvement in wildlife conservation and tourism development. He advocates that effective community participation requires supportive legal structures and institutional arrangements (Tosun, 2000).

Mutanga *et al.* (2015), Bello *et al.* (2017) and Mogomotsi *et al.* (2020) concur that the unfair distribution of benefits is another challenge constraining community participation in wildlife management both locally and internationally. They argue that protected area management agencies often present potential ecotourism benefits as an incentive to attract local people to participate in conservation and ecotourism development planning activities. However, their studies reveal that the perceived unfair distribution of and lack of access to, ecotourism benefits is now discouraging some local communities from continuing to engage in protected area management and ecotourism planning activities (Mutanga *et al.*, 2015; Mogomotsi *et al.*, 2020). In this regard, communities that receive more benefits from wildlife have a higher propensity to support conservation than those that do not (Mutanga *et al.*, 2015; Mogomotsi *et al.*, 2020).

In a study conducted by Mahlangabeza and Zwelakhe (2021) titled "Challenges in Community Participation in Management of Nature Reserve," one of the major challenges noted was the lack of collaboration and consultation by the reserve management. They assert that some community members believe that the game reserve management is serving its own interests by neglecting the concerns of community members. Furthermore, the study's empirical findings also found that political influence is affecting community participation at Dwesa-Cwebe Nature Reserve, as political officials and community leaders utilise the nature reserve for political benefits to certain people within or outside the community (Mahlangabeza and Zwelakhe, 2021). It was also revealed that there is a power imbalance in the relationship between game reserve management and community members, who are primarily under-represented, as the Community Property Associations (CPAs) were largely focused on serving to fulfil the interests of management (Mahlangabeza and Zwelakhe, 2021).

Moreover, Tosun (2000) and Bello *et al.* (2017) all buttress the fact that local people in most developing countries have limited capacity to engage in issues affecting their communities, resulting in few people getting involved in issues beyond their immediate family domain. As observed by Matseketsa *et al.* (2019), due to this feeling, communities end up not feeling part of the conservation strategies but simultaneously bear the costs of conservation, leading to uncooperative attitudes towards conservation.

UNLEASHING THE POTENTIAL OF COMMUNITY PARTICIPATION IN WILDLIFE CONSERVATION

In view of community participation in wildlife conservation, Musinguzi and Muzaale (2019) assert that the future of wildlife in Africa depends on the ability to ensure that wildlife is an economic benefit, not a burden, to those who live alongside it. In this regard, they proposed the realisation of benefit-sharing mechanisms, citing Siurua (2006) who argues that until people who have to coexist with wildlife can benefit proportionally to the costs incurred, they will not be willing to conserve wild flora and fauna. To facilitate the participation of local communities in the wildlife and ecotourism sectors in southern Africa, many countries have adopted Community Based Natural Resource Management (CBNRM)-related policies (Bello *et al.*, 2017; Hulme and Murphree, 1999). The underlying philosophy of the CBNRM programmes in southern African countries is that communities need to receive benefits arising from the use of natural resources for them to manage their resource base sustainably (Bello *et al.*, 2017).

Musinguzi and Muzaale (2019) conducted a study titled "Local community participation and wildlife conservation in Uganda." The study findings reveal that engaging with indigenous and local communities to gain their participation in biodiversity conservation by providing sustainable and alternative livelihood options through financial support, technical guidance and other measures is key in fighting poaching. They recommend that the Uganda Wildlife Authority (UWA) should involve and engage the community more to conserve wildlife through building long-term partnerships and resolving human-wildlife conflicts to obtain buy-in from the community. Furthermore, they recommend that a community conservation policy involving communities should be put in place to guide the involvement of communities in wildlife conservation (Musinguzi and Muzaale, 2019).

Buttressing the collaborative partnerships approach as a way of enhancing community participation in wildlife conservation, Dikobe and Thakadu (2019) argue that a collaborative management initiative has to impact various classes of a community, such as peasants, elites, different ethnic, gender and age groupings, locally influential persons and so forth, as involvement of these various classes brings cooperation and commitment to the programme – these being key ingredients of successful community participation initiatives. On the same note, Liebermann and Coulson (2004) assert that community participation requires establishing workable partnerships among local communities, police and wildlife management authorities and developing facilities for both the host community and tourists.

Furthermore, Wilfred (2010) advocates for enhancing community participation in wildlife management through the formation of "organising communities." This process involves communities preparing themselves to establish institutions, structures and instruments for managing resources within a wildlife management area. In Tanzania, this approach has led to the formation of community-based organisations (CBOs) bv designated rural communities, registered villages, or rural townships. These CBOs possess legal and legitimate constitutions, approved by the entire community. Examples of such initiatives include the Northern Botswana Human-Wildlife Coexistence Project, the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe, the Lion Guardian Project in Kenya and Project Coyote in the United States of America (Frank, 2016).

Bulte and Roundeau (2005), as cited in Mogomotsi *et al.* (2020) advocate for conservation community agreements as a valuable strategy to promote community participation in wildlife management. They argue that agreements to compensate community members for incurred losses mitigate the motivation to kill wild animals to safeguard property and foster local support for conservation efforts. This approach is evident in various countries, such as South Africa, where funeral costs for individuals killed by wildlife are covered (DeMotts and Hoon, 2012; Mogomotsi *et al.*, 2020). Similarly, in Botswana, farmers receive compensation for animals killed in enclosures or while being herded (Department of Wildlife and National Parks, 2013).

The study was underpinned by the following three objectives: (i) To determine the role of community participation in wildlife management at Victoria Falls Private Game Reserve; (ii) To establish challenges constraining community participation in wildlife management at Victoria Falls Private Game Reserve; and (iii) To establish strategies that enhance sustainable community participation in wildlife conservation and management. Furthermore, the study was hypothesised as follows:

- H0: Community participation initiatives have no positive significant influence on wildlife conservation at Victoria Falls Private Game Reserve.
- H1: Community participation initiatives have a positive significant influence on wildlife conservation at Victoria Falls Private Game Reserve.

CONCEPTUAL FRAMEWORK

The conceptual model grounding this study envisions enhanced wildlife management as the dependent variable, with community participation initiatives serving as the independent variable. Mediating variables include the legislative system, resource commitment and training. This concept hinges on the fact that community participation initiatives, such as advocating for policies that support conservation, representation in decision-making bodies, reporting wildlife crime and participation in wildlife research and monitoring programmes, could enhance wildlife management. This, in turn, could promote conservation, sustainable development and increased tourism business at Victoria Falls Private Game Reserve, as illustrated in Figure 1.

Independent Variable

Mediating Variables

Dependent Variable

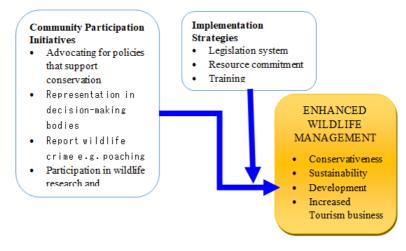


Figure 1: Conceptual Framework (Researchers, 2023)

THEORETICAL FRAMEWORK

The study was undergirded by Social Resource Theory (SRT), introduced by Cook and Emerson in 1978 in their seminal work, "Power, Equity and Commitment in Exchange Networks." Since then, the theory has been further developed and expanded upon by various scholars in sociology and related disciplines. Social Resource Theory is a sociological perspective that examines how individuals and groups utilise their social resources to gain advantage and achieve their goals within a social structure. The theory emphasizes the importance of social resources that include social connections, social status and social support, in influencing individual behaviour and outcomes (Cook and Emerson, 1978). As observed by SRT, individuals have access to different social resources based on their social positions and networks. These resources can be instrumental in achieving personal goals and can provide individuals with advantages in various social contexts (Cook and Emerson, 1978; Hobfoll *et al.*, 1990). The theory also argues

that individuals actively seek and leverage their social resources to maximise their outcomes. They engage in strategic behaviours such as networking, forming alliances and seeking social support to enhance their social capital (Hobfoll *et al.*, 1990; Roschk and Gelbrich, 2017). In the context of this study, community participation in wildlife management requires building and leveraging social connections between the local community and the private game reserve. The theory suggests that the success of community participation initiatives in wildlife management depends on the strength and quality of these social connections. This helped the researchers identify the role of community participation, the challenges it faces and provided insights into strategies for unleashing the potential of community participation in conservation efforts.

RESEARCH METHODOLOGY

The study adopted a mixed methods approach following a pragmatic philosophy. A cross-sectional descriptive survey research design was employed. The target population comprised 600 subjects drawn from the following categories or strata: Victoria Falls Private Game Reserve; Zimbabwe Republic Police; Victoria Falls community members; Zimbabwe Parks and Wildlife Management Authority; Zimbabwe Tourism Authority; Endangered Wildlife Trust; and Birdlife Zimbabwe. The rationale for choosing this target population stemmed from their broader knowledge and experience regarding wildlife management and community participation initiatives in Victoria Falls District. The sample size for quantitative data were 60 respondents, calculated as 10% of the target population, as suggested by Mugenda and Mugenda (2003), who opine that a simple sampling ratio of about 10% is ideal. The respondents provided quantitative data regarding the role of community participation in wildlife management (1st objective). Table 1 depicts the sample size adopted in this study through the probability stratified random sampling method.

Table 1: Sample Size

Population Category (Stratum)	Targeted	Sample Size
Zimbabwe Republic Police	20	2
Zimbabwe Parks and Wildlife	20	2
Management Authority		
Zimbabwe Tourism Authority	30	3
Victoria Falls Private Game Reserve	17	2
Endangered Wildlife Trust	9	1
Birdlife Zimbabwe	8	1
Community members	496	49
Total	600	60

Furthermore, the purposive sampling method was used to select six (6) key informants, coded as K1- K6. These key informants were managerial staff, each chosen from one of the organisations depicted in Table 1. The key informants provided the study with in-depth qualitative data through interviews, regarding challenges constraining community participation in wildlife management (2nd objective) and strategies that enhance sustainable community participation in wildlife conservation and management (3rd objective). Each interview session lasted for no more than 45 minutes and a research diary was used to record responses. Therefore, quantitative data were collected using structured questionnaires (n=60), while qualitative data were collected through semi-structured interviews (n=6). The five-point Likert scale (with a scale ranging from Strongly Disagree (1) - Disagree (2) -Neutral (3) - Agree (4) - Strongly Agree (5)) was utilised in the questionnaire to reveal the degree of opinions regarding core issues pertaining to the study variables. Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) Version 23.0, while qualitative data were analysed using thematic analysis.

FINDINGS

This section presents and discusses the results of the three critical issues underpinning this study: the role of community participation in

wildlife management, challenges constraining community participation in wildlife management at the game reserve and strategies to enhance sustainable community participation in wildlife conservation and management.

COMMUNITY PARTICIPATION IN WILDLIFE MANAGEMENT IN VICTORIA FALLS GAME RESERVE

The first objective sought to determine the role of community participation in wildlife management at Victoria Falls Private Game Reserve. Findings from respondents (n=60), excluding the key informant interviewees, are presented quantitatively in Table 1, followed by some interpretations. The researcher used the following parameters for the Likert scale: 1 =Strongly disagree, 2 =Disagree, 3 =Neutral, 4 =Agree and 5 =Strongly agree.

	(11 00)						
Statements of Community	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Deviation
Participation Initiatives							
Community members report wildlife crime such as poaching to the game authorities or police.	10	18	21	42	9	3.50	1.142
Community members advocate for policies that support conservation and protect their interests.	7	20	10	49	34	3.62	1.144
Community members have representation in decision-making bodies or committees related to wildlife management within the game reserve.	10	49	31	7	3	2.72	0.751
Community members engage in dialogue	11	27	36	24	2	2.35	1.010

Table 1: Responses on the Role of Community Participation (Survey, 2023) (n=60)

NGENGANI 3 (1&2), 2024

and collaboration in addressing human- wildlife conflicts with the game reserve.							
Community members have community- based conservation organisations for monitoring wildlife and conducting environmental education programmes.	10	22	22	39	5	2.99	0.715
There are established adequate communication channels between community members and the game reserve staff for sharing conservation efforts.	18	19	38	21	4	2.98	1.103
Mean Index 3.12							

The analysis in Table 1 shows that 42% of the respondents agreed that community members report wildlife crimes such as poaching to the game authorities or police. The mean rating of 3.50 suggests that, on average, respondents felt that local communities were moderately reporting wildlife illegal activities to the game authorities or the police. This finding resonates with that of a similar study conducted by Tarimo and Olotu (2020) in Rungwa Game Reserve in Tanzania, reveal that local communities shared confidential wildlife crime-related information that enabled the game reserve management to arrest poachers and confiscate many weapons.

49% of the respondents agreed with the statement that community members advocate for policies that support conservation and protect their interests. This statement received a mean rating of 3.62, indicating that, on average, respondents advocate for favorable policies that strike a balance between the interests of local communities and game reserve

wildlife conservation efforts. This is also supported by Tosun (2000) who argues that effective public participation in planning needs legal structures and institutional arrangements that can support local communities' participation.

Most respondents (49%) disagreed with the statement "Community members have representation in decision-making bodies or committees related to wildlife management within the game reserve." This statement received a mean rating of 2.72, indicating that, on average, respondents felt that there was no adequate representation of local communities in decision-making bodies or committees.

Thirty six percent (36%) of the respondents were neutral with the statement "Community members engage in dialogue and collaboration in addressing human-wildlife conflicts with the game reserve." A mean score of 2.35 implies that, on average, the respondents are not aware of human-wildlife conflict dialogues between community members and the game reserve. 39% of the respondents agreed that community members have community-based conservation organisations for monitoring wildlife and conducting environmental education programmes. However, a mean score of 2.99 indicates a fair existence of community organisations. This could be probably owing to the existence of the government-introduced Zimbabwe's CAMPFIRE, that has encouraged local communities to conserve local wildlife populations, as observed by Murombedzi (2016). Nevertheless, Ntuli (2019), as illustrated in the Literature Review, asserts that wildlife conservation projects can fail if policymakers do not take the local community's opinions into account and this has been the case in the CAMPFIRE programme in Zimbabwe.

Lastly, 38% of the respondents were neutral with the statement "There are established adequate communication channels between the private game reserve and the local community for sharing conservation

efforts." This was represented by a mean score of 2.98, which observe how a significant portion of the respondents did not perceive adequate communication channels between the game reserve and the local community. The game reserve's dissemination of information likely relies solely on the internet and internal publications and bulletins that target tourist attraction rather than local community members' participation.

Overall, the mean index of 3.12 suggests that, on average, respondents had a moderately positive perception of the role of community participation in wildlife management at Victoria Falls Private Game Reserve. However, there were variations in perceptions across different aspects, indicating areas that may require further improvement or attention. The standard deviations suggest that there was variability in responses, highlighting the diversity of opinions within the sample population.

HYPOTHESIS TESTING

- H0: Community participation initiatives have no positive significant influence on wildlife conservation at Victoria Falls Private Game Reserve.
- H1:Community participation initiatives have a positive significant influence on wildlife conservation at Victoria Falls Private Game Reserve.

1	Tuble = : Model Summary of Community Funderpution minutives							
	Model	R	R Square	Adjusted R Square				
	1	.184	.034	0.026				

Table 2: Model Summary of Community Participation Initiatives

Findings in Table 2 observe how the value of R- square is 0.034. This implies that 34% of variation of wildlife conservation was explained by community participation initiatives.

Mode	1	Sum of	Df	Mean	F	Sig.
		Squares		Square		
Regre	ssion	6.412	1	6.412	4.077	.040
1	Residual	182.453	59	1.573		
	Total	188.865	60			

Table 3: ANOVA Table of Community Participation Initiatives

Dependent variable: Wildlife Conservation

Predictors: (Constant): Community Participation Initiatives.

Table 3 indicates how, at 0.05 level of significance the ANOVA test proved that in this model the independent variable i.e. community participation initiatives are significant in predicting of wildlife conservation as shown by a significant value of 0.040 that is less 0.05 level of significance (p = 0.040 < 0.05).

 Table 4: Coefficients Model of Community Participation Initiatives
 (Survey, 2023)

Model	Unstandardi	ized	Standardized	Т	Sig.
	Coefficients		Coefficients		
	В	Std. Error	Beta		
1 (Constant)	3.308	.431		7.682	.000
Community	.204	.100	.184	2.032	0.042
Participation					
Initiatives					

Dependent variable: Wildlife Conservation

Findings in Table 4 show how community participation initiatives have a significant influence on wildlife conservation at Victoria Falls Private Game Reserve (t-statistic = 2.032 and p-value = 0.044 < 0.05). Therefore, at 5% level of significance the null hypothesis (*H0*) was rejected and concluded that community participation initiatives had a positive significant influence on wildlife conservation at Victoria Falls Private Game Reserve. Thus, for each unit increase in community participation initiatives there was a corresponding increase in wildlife conservation by 0.204.

CHALLENGES IN COMMUNITY PARTICIPATION IN THE VICTORIA FALLS GAME RESERVE

The second objective of this study sought to establish the challenges constraining community participation in wildlife management at Victoria Falls Private Game Reserve. Findings from the six key informants (**K1- K6**) interviewed in this study are as follows: All the key informants revealed that limited access to relevant information about wildlife management and tourism development was impeding community participation at the game reserve. They argue that when communities are not adequately informed or educated about the issues at hand, they may struggle to actively engage and make informed decisions. Informant **K4** had this to say:

Important information and updates regarding wildlife management decisions do not reach the community in a timely and accessible manner, thereby limiting their ability to provide input or voice concerns.

Most of the participants cited prevailing political instability and economic constraints in Zimbabwe as disrupting full community participation at the game reserve. For example, one of the participants, **K4** observe how:

Unstable political environment and economic hardships prevailing in Zimbabwe is diverting community attention and resources away from participating in wildlife management and tourism development activities, as each man is now solely focusing on things that provide food on his table.

The informants also highlighted that many community members lack awareness and understanding of the importance of wildlife management and conservation. For example, one of the participant, **K1** indicated that:

Sometimes community members are not aware of the ecological significance of certain wildlife species or the impacts of unsustainable practices on the local ecosystem, or the benefits of wildlife conservation, such as eco-tourism opportunities and this may discourage community members from actively engaging in conservation initiatives. In the same view, Mogomotsi *et al.* (2020) observe how, lack of awareness about environmental issues and low education levels may lead to communities rejecting wildlife conservation.

Limited capacity and skills: All the informants concur that the community members lacked the necessary knowledge, skills and training to actively engage in wildlife management activities. In this regard, the interviewee **K5** had this to say:

Oftentimes, community members lack skills related to monitoring, research, anti-poaching efforts and sustainable resource utilisation, making it challenging for them to contribute to scientific research or conservation planning.

This resonates with the findings of Tosun (2000) and Bello *et al* (2017) who concur that local people in most developing countries have little or limited capacity to be interested in handling issues affecting their communities and as a result, few people get involved in issues beyond their immediate family domain.

Two out of the six key informants highlighted that some community members surrounding Victoria Falls Private Game Reserve rely on natural resources for their livelihoods, as such, conflicting interests are possible since conservation measures restrict their access to resources, leading to resistance or limited participation in wildlife management initiatives. For example, interviewee, **K2** had this to say:

On one hand, most community members depend on hunting or fishing for subsistence, therefore, conservation regulations that impose restrictions or bans on these activities are met with resistance. On the other hand, livestock farmers perceive wildlife as competition for grazing lands or as a threat to their animals, creating conflicts of interest between conservation goals and sustaining their livelihoods.

The informants posited that there was insufficient financial incentives or compensation for communities engaging in wildlife management at Victoria Falls Game Reserve and this discouraged active participation. They claimed that lack of tangible benefits undermines community motivation and interest in conservation efforts. In this regard, informants **K2** and **K5** had this to say:

If community members do not perceive any direct financial gains from participating in wildlife management activities, such as revenue sharing schemes or income-generation opportunities, they may be less inclined to contribute their time and resources" (K2).

The costs associated with participating in conservation initiatives, such as purchasing equipment or attending training programmes, may outweigh the perceived benefits, making it financially challenging for community members to engage actively **(K5)**.

In support of this finding, Mutanga *et al.* (2015) and Mogomotsi *et al.* (2020) argue that the perceived unfair distribution of and lack of access to ecotourism benefits, is now discouraging some community members from continuing to engage in protected area management and ecotourism planning activities.

Limited collaboration and partnerships

The informants also highlighted inadequate collaboration and partnerships between the game reserve management and local communities as hindering effective participation. One key informant, **K2** observe how:

The game reserve management do not actively seek input from local communities when designing and implementing wildlife management strategies, leading to a lack of ownership and decreased community engagement.

In the same trope of thinking, Mahlangabeza and Zwelakhe (2021) assert that one of the major challenges noted hindering community participation was lack of collaboration and consultation by the reserve management.

STRATEGIES FOR ENHANCING SUSTAINABLE COMMUNITY PARTICIPATION

The third objective sought to establish strategies that enhance sustainable community participation in wildlife conservation and management. The study identified multiple ways that can be adopted to enhance sustainable community participation in wildlife conservation and management, as elaborated: All the study participants suggested for actively engaging and involving local communities in decision-making processes related to wildlife management. They revealed that game reserves should establish adequate platforms for regular communication and dialogue to gather local communities input, address concerns and ensure their voices are heard. Participant **K6** had this to say:

Empower communities by providing them with the necessary knowledge, skills and resources to actively participate in wildlife management activities.

In the same line of thinking, the participant, K5 responded:

....establish effective communication channels between the private game reserve and the local community e.g. on social media platforms. Thereby, the game reserve should regularly update community members on wildlife conservation efforts, share success stories and seek their input and feedback.

The participants alluded that game reserves should design and implement incentive-based programmes that reward communities for their conservation efforts. One of the participant, **K1** had this to say:

.....this can include providing incentives for reporting wildlife crime, implementing sustainable land-use practices, or engaging in habitat restoration initiatives.

This is also supported by Kipkeu *et al.* (2014) and Tarimo and Olotu (2020) who highlight that local communities around protected areas seek to experience a sense of benefit sharing through their involvement in conservation activities, as this may help to ensure that they receive rational returns for putting their efforts and resources into sustainable wildlife conservation.

Four (4) out the six (6) key informants suggested that, game reserves should develop fair and transparent benefit-sharing mechanisms that ensure communities receive tangible benefits from wildlife management activities. Interviewee, **K4** enlightened that:

.... this can include revenue-sharing from tourism, trophy hunting, or other income-generating activities. Subsequently, the game reserve should clearly communicate how these benefits would be distributed and ensure they reach the community members directly."

This finding resonates with the findings made by Musinguzi and Muzaale (2019), who advocate that the future of wildlife in Africa depends on the ability to ensure that wildlife is an economic benefit-shared and not a burden to those who live side by side with it.

All the participants submitted that, the game reserve management need to conduct educational programmes and awareness campaigns within the local communities, highlighting the importance of wildlife conservation, the ecological value of the game reserve and the benefits of sustainable wildlife management, as this would foster a sense of pride and stewardship among community members towards their natural heritage. In this regard, participant, **K2** had this to say:

The game reserve should conduct awareness programmes in local markets where wildlife products may be sold illegally. Educate community members about the detrimental impacts of illegal wildlife trade and encourage them to report any illegal activities.

All the key informants emphasised recognising and empowering of local leaders such as chiefs and headmen within communities to enhance community participation. They argue that local leaders who understand the needs, concerns and aspirations of their communities can advocate for their interests, facilitate communication and bridge the gap between community members and external stakeholders. In a seemingly view, participant **K6** recommended that:

There is a need to recognise and incorporate traditional ecological knowledge held by the local community leaders into wildlife management

practices. This involves valuing and respecting indigenous knowledge systems that have been passed down through generations.

The same idea is supported by Noe and Kangalawe (2015) who stress how traditional ecological knowledge, customary land and resource management systems and self-governing institutions of indigenous peoples contribute significantly to conservation efforts.

The participants also suggested fostering of partnerships between the game reserve management, local communities, governmental agencies and non-governmental organisations. Participant **K2** argues that:

Collaborative efforts can lead to more effective and inclusive wildlife management strategies, as it pools resources and expertise together.

Liebermann and Coulson (2004) also align to the thinking that community participation requires establishing workable partnerships among local communities, police and wildlife management authorities and developing facilities for both the host community and tourists. All the participants also suggested engaging community members in wildlife evidence-based research projects, such as monitoring specific species or studying their behaviour, as this involvement fosters a sense of ownership and promotes scientific understanding of local wildlife populations. Interviewee **K6** had this to say:

Involving community members in data collection efforts, such as wildlife surveys, population counts, or habitat mapping, the game reserve can gather valuable information while also fostering a sense of ownership and pride among community members.

These findings denote that community participation in wildlife management requires building and leveraging social connections between the local community and the private game reserve. This, ultimately resonates with the Social Resource Theory by Cook and Emerson (1978) that suggests that the success of community participation initiatives in wildlife management depend on the strength and quality of these social connections.

CONCLUSION AND RECOMMENDATIONS

The study concludes that community participation plays a significant role in wildlife management at Victoria Falls Private Game Reserve. This is evidenced by the fact that community members report wildlife crime to the game authorities or police, advocate for policies that support conservation and protect their interests and have communitybased conservation organisations for monitoring wildlife and conducting environmental education programmes, among other key initiatives. However, community participation at the game reserve faces several challenges, namely: lack of access to information, power imbalances, political and economic instability, lack of awareness and education, limited capacity and skills, conflicting livelihood interests, limited financial incentives and limited collaborations and partnerships. Therefore, strategies advocated to enhance sustainable community participation in wildlife conservation and management include: community engagement; incentivizing conservation efforts; community-led research initiatives; and empowering local leadership, among others. The Victoria Falls Private Game Reserve should promote community-led research initiatives, as this involvement fosters a sense of ownership and promotes scientific understanding of local wildlife populations. Game reserves should design and implement incentive-based programmes that reward communities for their conservation efforts and at the same time develop fair and transparent benefit-sharing mechanisms that ensure communities receive tangible benefits from wildlife management activities. Game reserves management should conduct educational programmes and awareness campaigns within the local communities, highlighting the importance of wildlife conservation, the ecological value of game ranges and the benefits of sustainable wildlife management. This would foster a sense of pride and stewardship among community members towards their natural heritage. Furthermore, game reserves should ensure that local communities have representation in committees related to wildlife management. This would give them a

platform to voice their concerns and actively participate in wildlife conservation.

REFERENCES

- Ayivor, J. S. (2014). Access to reeds and mat making in the lower V olta basin of G hana. *Singapore Journal of Tropical Geography*, 35(2), 197-212.
- Bello, F.G, Lovelock, B. and Carr, N. (2017). Constraints of Community Participation in Protected Area-based Tourism Planning: The Case of Malawi. *Journal of Ecotourism*, 16(2), 131-151.
- Bulte, E.H. and Rondeau, D., 2005. Why compensating wildlife damages may be bad for conservation. The Journal of Wildlife Management, 69(1), 14-19.
- Cook, K.S and Emerson, R.M (1978). Power, Equity and Commitment in Exchange Networks. *American Sociological Review*, 43(5), 721-739.
- Department of Wildlife and National Parks. (2013). Compensation Guidelines for Damages Caused by Elephants and Lions. Department of Wildlife and National Parks.
- Dikobe, L. M. and Thakadu, O. T. (2019). Conservation and Management of Wildlife in Botswana – Strategies for 21st century. A Paper Presented on a National Conference on Conservation and Wildlife Management in Botswana 13th – 17th 1997, 275-284.
- Dube, N. (2019). Voices from the Village on Trophy Hunting in Hwange District, Zimbabwe. *Ecological Economics*, *159*, 335–343.
- Dube, K. and Nhamo, G. (2020). Tourist Perceptions and Attitudes Regarding the Impacts of Climate Change on Victoria Falls. Bulletin of Geography. *Socio-economic Series* (47), 27-44.
- Frank, B. (2016). Human-wildlife Conflict and the Need to Include Tolerance and Coexistence: An Introductory Comment. *Society and Nature Resources*, 29(6), 738–743.

- Hansen, M., Islar, M. and Krause, T. (2015). The Politics of Natural Resource Enclosure in South Africa and Ecuador. *Conservation and Society*, 13(3), 287-298.
- Hobfoll, S. E., Freedy, J., Lane, C. and Geller, P. (1990). Conservation of Social Resources: Social Support Resource Theory. *Journal of Social and Personal Relationships*, 7(4), 465-478.
- Hulme, D. and Murphree, M. (1999). Communities, wildlife and the 'new conservation' in Africa. Journal of International Development: *The Journal of the Development Studies Association*, 11(2), 277-285.
- Isiugo, N. and Obioha, E. E. (2015). Community Participation in Wildlife Conservation and Protection in Oban-Hills Area of Cross River State, Nigeria. *Journal of Sociology and Social Anthropology*, 6(2), 279-291.
- Kaba, O. S. M. (2007). Biodiversity Conservation of the Diaban Basin. International NGO Journal, 2(3), 060-062.
- Kipkeu, M. L., Mwangi, S.W. and Njogu, J. A. M. E. S. (2014). Incentives for Enhanced Community Participation in Wildlife Conservation in Amboseli, Kenya: Egerton University, Institutional Repository.
- Liebermann, S. and Coulson, J. (2004). Participatory Mapping for Crime Prevention in South Africa-local Solutions to Local Problems. *Environment and Urbanization*, *16*(2), 125-134.
- Machamacha, M., Herat, S. and Mudzingwa, M. (2011). Communitybased waste management initiative: case study from Harare, Zimbabwe. International Journal of Environment and Waste Management, 7(3-4), 335-343.
- Mahlangabeza, L. and Zwelakhe, L. (2021). Challenges in Community Participation in Management of Nature Reserves. *Mediterranean Journal of Social Sciences*, 12(6), 74-84.
- Mapira, J (2017). Zimbabwe's Parks and Wildlife Management Authority: Challenges for Sustainable Development. *European Journal of Social Sciences Studies*, 2(9), 298.

- Matseketsa, G., Mukamuri, B. B., Muboko, N. and Gandiwa, E. (2019). An Assessment of Local People's Support to Private Wildlife Conservation: A Case of Save Valley Conservancy and Fringe Communities, Zimbabwe. *Scientifica*, 1-11.
- Mir, Z. R., Noor, A., Habib, B. and Veeraswami, G. G. (2015). Attitudes of Local People Toward Wildlife Conservation: A Case Study from the Kashmir Valley. *Mountain Research and Development*, 34(4), 392–400.
- Mogomotsi, K., Stone L. S., Mogomotsi, G. E. and Dube, N. (2020). Factors Influencing Community Participation in Wildlife Conservation. *Human Dimensions of Wildlife*, 25(4), 372-386.
- Mugenda, O. M. and Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Murombedzi, J. C. (2016). Inequality and Natural Resources in Africa. *World Social Science Report*, 59-62.
- Musinguzi, J. and Muzaale, T. (2019). Local Community Participation and Wildlife Conservation in Uganda. *Ugandan Journal of Management and Public Policy Studies*, 16(1), 118-133.
- Mutanga, C. N., Vengesayi, S., Muboko, N. and Gandiwa, E. (2015).
 Towards Harmonious Conservation Relationships: A Framework for Understanding Protected Area Staff-local Community Relationships in Developing Countries. *Journal of Nature Conservation*, 25, 8–16.
- Ntuli, H., Okuma, B. O. and Muchapondwa, E. (2019). Local Communities and Wildlife Conservation in Zimbabwe: Are CAMPFIRE communities ready to take over wildlife management from the Rural District Councils? *Environmental for Development*.
- Noe, C. and Kangalawe, R. Y. (2015). Wildlife Protection, Community Participation in Conservation and (dis) Empowerment in Southern Tanzania. *Conservation and Society*, 13(3), 244-253.
- Paul, S. (1987). Community Participation in Development Projects. Washington, DC: World Bank.

- Reed, M. S. and Stringer, L. C. (2016). Land Degradation, Desertification and Climate Change: Anticipating, Assessing and Adapting to Future Change. London: Routledge.
- Roschk, H. and Gelbrich, K. (2017). Compensation Revisited: A Social Resource Theory Perspective on Offering a Monetary Resource after a Service Failure. *Journal of Service Research*, 20(4), 393-408.
- Timothy, D. J. (2019). Tourism, Border Disputes and Claims to Territorial Sovereignty. *Tourism and Hospitality in Conflict-ridden Destinations*, 25-38.
- Tarimo, K. V. and Olotu, M. I. (2020). Local Community Participation in Wildlife Conservation and Management in Rungwa Game Reserve, Tanzania. *Environmental and Socio-economic Studies*, 8(2), 21-31.
- Tosun, C. (2000). Limits to Community Participation in the Tourism Development Process in Developing Countries. *Tourism Management*, 21(6), 613-633.
- Vimal, R., Khalil-Lortie, M. and Gatiso, T. (2018). What Does Community Participation in Nature Protection Mean? The Case of Tropical National Parks in Africa. *Environmental Conservation*, 45(4), 333-341.
- Wilfred, P. (2010). Towards Sustainable Wildlife Management Areas in Tanzania. *Tropical Conservation Science*, 3(1), 103-116.