THE IMPACT OF POACHING ON WILDLIFE POPULATION AND TOURISM VIABILITY: A CASE STUDY OF MURCHISON FALLS NATIONAL PARK, MASINDI DISTRICT.

BY

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DECLARATION

I MULASA SOLOMON, 2300402468 declare that this research report is my original work and has never been submitted to any other university or institution for any academic award. All sources of information used have been duly acknowledged.

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APPROVAL

This research report is submitted to Busitema University for examination as a partial fulfillment of the requirements for the award of a Bachelor of Tourism and Travel Management, with the approval of my Academic Supervisor.

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DEDICATION

This research report is dedicated to my family, Mr. Ssekiziyivu Mulasa Solomon who is my father and my sister Mrs. Nakitto Sandra, whose sacrifices and unwavering encouragement have been my greatest inspiration. To my friends and peers, for their camaraderie and support. To my lecturers and mentors, for their tireless efforts in shaping my academic growth. And to God Almighty, for His infinite mercy, wisdom, and blessings that have guided every step of my path.

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LIST OF ACRONYMS

ACRONYM	MEANING
GDP	Gross Domestic Product
IUCN	International Union for Conservation of Nature
MTWA	Ministry of Tourism, Wildlife, and Antiquities
MTWA	Ministry of Tourism, Wildlife and Antiquities
SPSS	Statistical Package for Social Sciences
UBOS	Uganda Bureau of Statistics
UNWTO	United Nations World Tourism Organization
UTB	Uganda Tourism Board
WTTC	World Tourism and Travel Council
WWF	World Wildlife Fund

ABSTRACT

Poaching remains a critical threat to wildlife conservation and nature-based tourism sustainability globally, yet localized empirical evidence linking poaching to wildlife population dynamics and tourism viability remains limited, particularly in Uganda's protected areas. This study investigated the impact of poaching on wildlife populations and tourism viability in Murchison Falls National Park, Uganda, from 2022 to 2025. Guided by Sustainable Tourism Theory, the study employed a cross-sectional research design with a sample of 59 respondents comprising Uganda Wildlife Authority staff, park rangers, tour operators, tourists, conservation officers, and community members. Data were collected using structured questionnaires and analyzed using descriptive statistics, Pearson correlation, and regression analysis. Findings revealed that respondents were neutral regarding the level and forms of poaching (grand mean = 3.30), with wire snaring and commercial poaching identified as the most common methods. Poaching demonstrated a strong positive relationship with wildlife population dynamics ($r = 0.752$, $p = 0.000$) and significantly predicted changes in wildlife populations ($\beta = 0.452$, $p = 0.000$), affecting species abundance, mortality rates, and spatial distribution, particularly among large mammals. Wildlife population dynamics exhibited a strong positive relationship with tourism viability ($r = 0.798$, $p = 0.000$), with respondents agreeing that fewer wildlife sightings negatively affect visitor experience (mean = 3.44), reduction in wildlife leads to decreased tourist arrivals (mean = 3.44), and repeat visits depend on quality of wildlife experiences (mean = 3.51). The regression model explained 67.9% of the variance in wildlife population dynamics and tourism viability ($R^2 = 0.679$, $F = 59.892$, $p = 0.000$). The study concludes that poaching significantly influences both wildlife population dynamics and tourism viability, though tourism at Murchison Falls National Park demonstrates resilience despite wildlife declines. Recommendations include strengthening anti-poaching enforcement, enhancing community engagement through alternative livelihood programs, implementing regular wildlife monitoring, diversifying tourism products, and adopting sustainable tourism practices to ensure long-term conservation and tourism sustainability.

CHAPTER ONE

BACKGROUND OF THE STUDY

1.0 Introduction

This chapter of research consists of the background information, statement of the problem, purpose of the study, research objectives, research questions, scope of the study, significance of the study, and the conceptual framework.

1.1 Background of the Study

Tourism is a major global economic activity that depends heavily on natural resources, particularly wildlife, for its sustainability and competitiveness. Wildlife-based tourism contributes significantly to employment, foreign exchange earnings, and conservation financing in many destinations (Castley, 2025). However, the sustainability of tourism is increasingly threatened by human-induced pressures, among which poaching remains a critical challenge. Poaching, defined as the illegal hunting, capturing, or killing of wildlife in violation of conservation laws, reduces wildlife populations, disrupts ecological balance, and undermines conservation efforts (Goboro et al., 2025). As wildlife populations decline, tourism destinations risk losing their attractiveness, thereby affecting their long-term viability.

From a global perspective, the impact of poaching on wildlife populations and tourism viability is evident in regions such as Asia, where illegal wildlife trade operates through complex international networks. Southeast Asian countries, including Thailand and Vietnam, acted as both sources and consumers of wildlife products, with the illegal trade generating between USD 7 billion and 23 billion annually (Yuliantiningsih et al., 2023). This extensive exploitation led to significant declines in species such as pangolins and elephants, which are key attractions in wildlife tourism (Kaur et al., 2026). The reduction in these species directly affected tourism by lowering destination competitiveness, reducing tourist inflows, and weakening the overall viability of tourism systems (Mutanga & Gandiwa, 2024).

In Africa, similar patterns were observed where poaching continued to threaten wildlife populations that form the foundation of tourism. For instance, in Mole National Park in Ghana,

poaching significantly affected populations of large mammals such as elephants, antelopes, and buffaloes, which are central to wildlife tourism experiences (Wiafe, 2026). The persistence of poaching was often associated with factors such as poverty, population pressure, and weak enforcement mechanisms, which limited conservation effectiveness (Zyambo et al., 2022). Additionally, wildlife crime in West Africa demonstrated the transboundary nature of poaching, where illegal trade networks facilitated cross-border movement of wildlife products, further intensifying pressure on wildlife resources and undermining tourism development (Eshebi et al., 2025).

In Uganda, tourism remained a key economic sector largely supported by wildlife resources. The country recorded approximately 1.37 million international tourist arrivals and generated about USD 1.28 billion in revenue in 2024 (Ministry of Tourism, Wildlife, and Antiquities [MTWA] & Uganda Bureau of Statistics [UBOS], 2024). Despite this contribution, poaching continued to pose a significant threat to wildlife populations and tourism sustainability. For example, lion populations declined from 373 in 2023 to 292 in 2024, largely due to poaching and human-wildlife conflict (Wildlife Conservation Society Uganda, 2024). Such declines reduced the quality of wildlife-based tourism experiences, potentially affecting tourist satisfaction and destination competitiveness.

At the local level, Masindi District, where Murchison Falls National Park is located, played an important role in Uganda's tourism sector through employment creation, local business development, and revenue-sharing initiatives (Lugya, 2024). However, communities surrounding protected areas often engaged in subsistence poaching due to poverty, food insecurity, and limited livelihood opportunities (Lyakurwa et al., 2024). These practices negatively affected wildlife populations and threatened the sustainability of tourism benefits within the region.

Murchison Falls National Park provided a critical case study for examining the localized impacts of poaching on wildlife populations and tourism viability. Historically, the park experienced severe wildlife declines due to intensive poaching, particularly during periods of political instability, which drastically reduced populations of key species such as elephants (Nyakabwa, 2023). Although conservation interventions contributed to gradual recovery, poaching remained persistent through practices such as snaring and illegal hunting (Montgomery et al., 2023). This continued pressure on wildlife resources had significant implications for tourism, as reduced

animal populations led to fewer wildlife sightings, lower tourist satisfaction, and potential declines in visitation and revenue (WTTC, 2023).

To find out the impact of poaching on wildlife populations and tourism viability in Murchison Falls National Park, this study was guided by Sustainable Tourism Theory, which emphasized the balance between environmental conservation and economic development (United Nations World Tourism Organization [UNWTO], 2022). The study aimed to contribute to a deeper understanding of how poaching affected both ecological sustainability and tourism performance, thereby informing policy and management strategies for sustainable wildlife conservation and tourism development.

1.2 Statement of the Problem

Poaching remained a major global challenge that undermined wildlife conservation and the sustainability of nature-based tourism, despite intensified conservation efforts. The illegal wildlife trade was one of the most lucrative transnational crimes worldwide, exerting significant pressure on wildlife species and ecosystems (Duffy, 2022a). Given that wildlife tourism depends on healthy animal populations and intact ecosystems, persistent poaching reduced destination attractiveness, limited tourism revenue, and weakened long-term tourism viability (Taveras-Dalmau & Coghlan, 2025).

In Uganda, where wildlife-based tourism is a key contributor to national revenue and rural livelihoods, notable progress had been made in restoring wildlife populations following historical declines. However, illegal hunting, snaring, and wildlife trafficking continued to threaten conservation gains and the sustainability of tourism (Twesiime, 2018). Murchison Falls National Park, as one of Uganda's wildlife destinations, played a critical role in supporting tourism and biodiversity conservation. Despite ongoing anti-poaching interventions, the park continued to experience localized illegal activities that threatened wildlife populations and reduced the quality of tourism experiences.

Although existing studies have widely examined the ecological impacts of poaching at global and regional levels, there was limited site-specific research in Uganda that integrated wildlife population dynamics with tourism viability, particularly in the post-pandemic period (2022–2025). This lack of localized empirical evidence constrained effective policy and management responses.

Therefore, this study sought to find out the impact of poaching on wildlife populations and tourism viability in Murchison Falls National Park in order to generate context-specific evidence to support sustainable conservation and tourism development.

1.3 Purpose of the Study

The primary purpose of this study was to find out the impact of poaching on wildlife populations and tourism viability, with a specific focus on Murchison Falls National Park in Uganda as a case study.

1.4 Research Objectives

I. To find out the level and forms of poaching in Murchison Falls National Park.
II. To find out the effect of poaching on wildlife population dynamics in the park.
III. To find out the impact of wildlife population changes on tourism viability.

1.5 Research Questions

I. What is the level and what are the forms of poaching in Murchison Falls National Park?
II. What is the effect of poaching on wildlife population dynamics in Murchison Falls National Park?
III. What is the impact of wildlife population changes on tourism viability in Murchison Falls National Park?

1.6.0 Scope of the Study

1.6.1 Content Scope

The study focused on the impacts of poaching on wildlife population and tourism viability.

1.6.2 Geographical Scope

The research was carried out in Murchison Falls National Park in Masindi District.

1.6.3 Time Scope

The time frame of the study was from 2022 to 2025.

1.7 Significance of the Study

This study on poaching in Murchison Falls National Park holds substantial value across various domains, contributing to knowledge advancement, informed decision-making, and practical applications.

To Academia

The study enriched the existing body of literature on wildlife conservation by providing empirical data on poaching levels, forms, and their ecological impacts in a key African national park. This addressed potential research gaps in population dynamics and tourism linkages, offering a foundation for future scholarly work in environmental science, ecology, and biodiversity studies.

It served as a reference for researchers and students, facilitating comparative analyses with other protected areas and promoting interdisciplinary approaches that integrate ecology, economics, and social sciences.

To Policy Makers

Findings informed evidence-based policy formulation and reforms aimed at strengthening anti-poaching measures, wildlife protection laws, and sustainable management strategies in Uganda and similar regions. For instance, insights into poaching effects on population dynamics could guide resource allocation for enforcement and monitoring.

The analysis of tourism viability impacts supported policies that balance conservation with economic development, aiding government bodies like the Uganda Wildlife Authority (UWA) in prioritizing interventions to mitigate biodiversity loss and enhance national park governance.

To Organizations (Wildlife Conservation and Tourism Sectors)

Conservation organizations, such as the World Wildlife Fund (WWF) or local NGOs, benefited from detailed assessments of poaching forms and effects, enabling them to design targeted interventions, awareness campaigns, and community-based anti-poaching programs to restore wildlife populations.

Tourism-related entities, including tour operators, hospitality sectors, and the Uganda Tourism Board, gained insights into how population changes affect visitor experiences and revenue. This informed strategies to promote eco-tourism, diversify attractions, and ensure long-term sustainability, ultimately boosting economic contributions from the park.

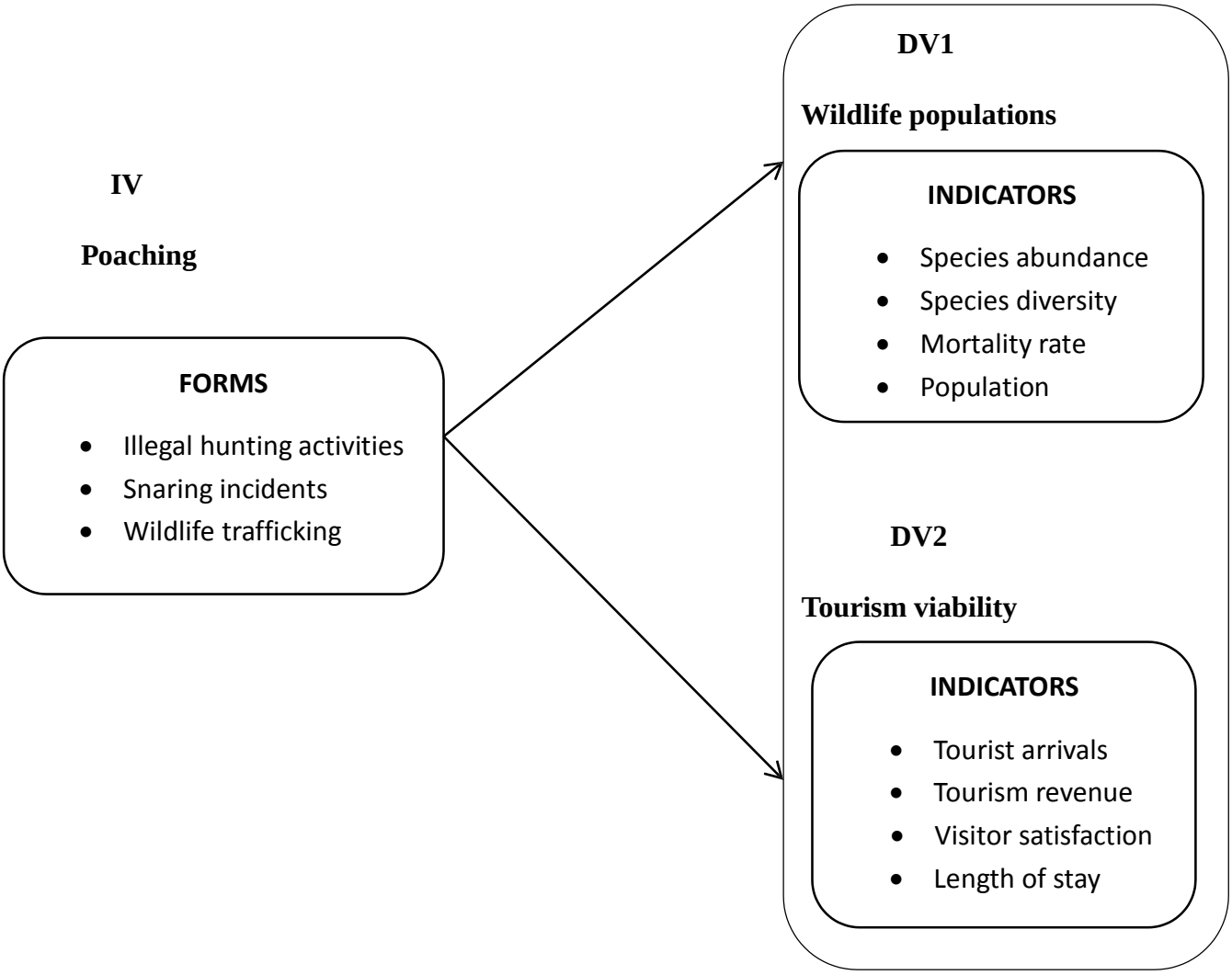
To Other Stakeholders

Local communities surrounding Murchison Falls National Park received practical recommendations on alternative livelihoods and community involvement in conservation, reducing reliance on poaching and fostering human-wildlife coexistence.

The broader public and international bodies (e.g., UNESCO or CITES) were sensitized to the urgency of poaching issues, promoting global advocacy for biodiversity preservation and supporting funding for transboundary conservation efforts in East Africa.

1.8 Conceptual Framework

Figure 1: Conceptual framework showing the relationship between poaching, wildlife populations, and tourism viability.



Source: Adopted from (World Wildlife Fund, 2023), (United Nations World Tourism Organization, 2022), and (International Union for Conservation of Nature, 2024) and modified by the researcher to explain the relationship between poaching, wildlife populations, and tourism viability.

1.9 Explanation of the Conceptual Framework

A conceptual framework is a visual and analytical tool used to illustrate the relationship between variables in a study and how they influence each other. In this study, the independent variable is poaching, which is operationalized through illegal hunting, snaring, and wildlife trafficking.

Poaching directly affects two dependent variables: wildlife populations and tourism viability. Wildlife populations are measured using indicators such as species abundance, species diversity, mortality rate, and spatial distribution. Increased poaching leads to a decline in wildlife populations, which disrupts ecological balance and threatens biodiversity.

Tourism viability is measured through tourist arrivals, tourism revenue, visitor satisfaction, and length of stay. A reduction in wildlife populations negatively impacts tourism attractiveness, thereby reducing tourist inflow and overall tourism performance.

The relationship between poaching and the dependent variables is influenced by intervening variables, including anti-poaching enforcement, community involvement, conservation policies, and problem animal control. Strong enforcement and inclusive conservation strategies can mitigate the negative effects of poaching, while weak systems may exacerbate its impact.

Overall, the framework demonstrates that poaching has both ecological and economic consequences, affecting wildlife sustainability and the long-term viability of tourism.

1.10 Definition of Key Terms

1.10.1 Poaching

Poaching refers to the illegal hunting, capturing, or killing of wildlife in violation of national and international conservation laws. It includes activities such as unauthorized hunting, use of snares, and wildlife trafficking for commercial purposes (United Nations Office on Drugs and Crime, 2022). Poaching is a major driver of biodiversity loss and threatens the survival of many endangered species.

1.10.2 Wildlife Populations

Wildlife populations refer to the number, distribution, and diversity of wild animal species within a specific ecosystem. These populations are essential for maintaining ecological balance and supporting ecosystem services. Changes in wildlife populations are often used as indicators of environmental health (International Union for Conservation of Nature, 2024).

1.10.3 Tourism Viability

Tourism viability refers to the ability of a destination to sustain tourism activities over time while maintaining economic profitability, environmental integrity, and visitor satisfaction. It encompasses factors such as tourist arrivals, revenue generation, and the overall attractiveness of a destination (United Nations World Tourism Organization, 2022).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter presents theoretical review and empirical review according to the available literature and research that was carried out in relation to the stated objectives of the study. The chapter further presents a summary of the different literature reviewed and identifies gaps in the existing body of knowledge.

2.1 Theoretical Review

Sustainable Tourism Theory emphasizes the need to balance environmental conservation with socio-economic development in tourism destinations. The theory focuses on minimizing the negative impacts of tourism activities while maximizing benefits to local communities and future generations (Shekhar, 2024). It promotes responsible use of natural resources, conservation of biodiversity, and long-term sustainability of tourism systems.

The theory provides a framework for understanding how human activities such as poaching affect the sustainability of tourism. According to (Acharya, 2023), sustainable tourism requires the protection of wildlife resources, which are key attractions in nature-based tourism destinations. When wildlife is depleted through illegal activities such as poaching, the ecological balance is disrupted, leading to negative consequences for tourism performance.

Recent studies indicate that sustainable tourism is closely linked to wildlife conservation, as the survival of tourism destinations depends on the availability and health of wildlife populations (Wójcicki et al., 2023). The theory further highlights that unsustainable practices, including illegal hunting and wildlife trafficking, undermine conservation efforts and reduce the attractiveness of destinations.

In relation to this study, Sustainable Tourism Theory explains the relationship between the independent variable (poaching) and the dependent variables (wildlife population and tourism viability). Poaching leads to a decline in wildlife populations through increased mortality rates, reduced species diversity, and disruption of ecosystems (Goboro et al., 2025). This decline

negatively affects tourism viability by reducing tourist satisfaction, lowering visitor numbers, and decreasing tourism revenue.

The theory also recognizes the role of intervening variables such as conservation policies, anti-poaching enforcement, and community involvement in influencing outcomes. Effective implementation of these measures can help mitigate the negative impacts of poaching and promote sustainable tourism development (Taveras-Dalmau & Coghlan, 2025).

Therefore, Sustainable Tourism Theory is relevant to this study as it provides a clear link between poaching, wildlife population dynamics, and tourism viability, particularly in protected areas such as Murchison Falls National Park.

2.2 Empirical Literature Review

2.2.1 Level and forms of poaching in Murchison Falls National Park

Poaching remains a major challenge to wildlife conservation across the world, taking different forms such as illegal hunting, snaring, bushmeat trade, and wildlife trafficking. According to (Goboro et al., 2025), poaching is driven by socio-economic factors such as poverty, high demand for wildlife products, and weak enforcement of conservation laws.

In Africa, studies show that both subsistence and commercial poaching are common in protected areas. (Aisha et al., 2025) observed that snaring is one of the most widely used methods due to its affordability and effectiveness. Similarly, (Stone & Stone, 2022) found that communities surrounding protected areas engage in illegal hunting for bushmeat as a source of livelihood.

In Uganda, poaching continues to exist despite government efforts to control it. Uganda Wildlife Authority (2024) identified common forms of poaching including wire snaring, illegal use of firearms, and organized wildlife trafficking. These practices are often associated with poverty, unemployment, and limited alternative income sources among local communities.

Duffy, (2022b) further noted that wildlife crime has become more organized, involving cross-border networks that facilitate illegal trade in wildlife products. This has increased pressure on endangered species and intensified the scale of poaching activities.

Although several studies have examined poaching at national and regional levels, there is limited empirical evidence specifically focusing on the level and forms of poaching in Murchison Falls

National Park. Most studies provide generalized findings, creating a gap in localized understanding of poaching patterns within the park.

2.2.2 Effect of poaching on wildlife population dynamics in the park

Poaching has significant effects on wildlife population dynamics, including reductions in species abundance, increased mortality rates, and disruption of ecological systems. According to (Yusefi et al., 2022), illegal hunting directly reduces wildlife populations and affects their natural reproduction processes.

Recent studies indicate that poaching disproportionately affects large mammals, which are key components of wildlife tourism. Almeida et al., (2025) reported a decline in lion populations due to poaching and human-wildlife conflicts. Similarly, (Segniagbeto et al., 2022) highlighted that elephant populations continue to decline due to illegal ivory trade.

Poaching also affects biodiversity by altering species composition and ecosystem stability. (Hald-Mortensen, 2023) found that the removal of key species disrupts food chains and ecological balance, leading to long-term environmental consequences.

In Murchison Falls National Park, historical evidence shows that wildlife populations were severely reduced due to intense poaching in the past. Although conservation efforts have contributed to recovery, illegal activities such as snaring continue to threaten wildlife populations (UWA, 2024).

However, existing literature mainly focuses on general wildlife decline and lacks detailed analysis of population dynamics such as species diversity, distribution, and long-term changes within specific protected areas. This indicates a gap in understanding the full impact of poaching on wildlife population dynamics in Murchison Falls National Park.

2.2.3 Impact of wildlife population changes on tourism viability

Wildlife populations play a critical role in determining tourism viability, particularly in destinations that rely on nature-based tourism. According to (Mariyam et al., 2024), the availability and diversity of wildlife species significantly influence tourist satisfaction, visitation rates, and revenue generation.

Studies show that a decline in wildlife populations negatively affects tourism performance. Lubbe, (2022) found that reduced wildlife sightings lead to lower tourist satisfaction and decreased visitation. Similarly, (Gössling & Scott, 2026) noted that biodiversity loss reduces the competitiveness of tourism destinations.

In Uganda, wildlife-based tourism contributes significantly to the economy. MTWA and UBOS (2024) reported that tourism generates substantial revenue, largely driven by wildlife attractions. However, declining wildlife populations due to poaching threaten the sustainability of this sector.

WTTC (2023) further emphasized that tourism viability depends on factors such as visitor satisfaction, length of stay, and repeat visits, all of which are influenced by the quality of wildlife experiences. A reduction in wildlife populations therefore leads to decreased tourism revenue and economic losses.

Despite these findings, there is limited empirical research that directly links wildlife population changes to tourism viability at the park level. Most studies focus on broader national trends rather than specific destinations such as Murchison Falls National Park. This creates a gap in understanding how wildlife population changes influence tourism viability in localized contexts.

2.3 Gaps in Literature

The literature reviewed reveals several gaps in the existing body of knowledge.

There is limited site-specific research on the level and forms of poaching in Murchison Falls National Park, as most studies focus on general or regional trends. Additionally, many studies examine poaching, wildlife populations, and tourism viability independently, with limited integration of these variables in a single study framework.

Furthermore, there is insufficient research on detailed wildlife population dynamics, including species diversity, distribution, and long-term trends in relation to poaching. Existing studies also provide limited empirical evidence linking wildlife population changes directly to tourism viability indicators such as tourist arrivals, revenue, and visitor satisfaction.

Moreover, there is a lack of recent post-pandemic studies (2022–2025) that examine how poaching and wildlife population changes affect tourism viability, despite significant changes in tourism patterns during this period.

Therefore, this study seeks to bridge these gaps by providing a comprehensive and localized analysis of the impact of poaching on wildlife population dynamics and tourism viability in Murchison Falls National Park.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents research design, study population, sample size, sampling methods, type of data, data collection methods, data analysis plan, data analysis techniques and methods, data reliability and validity, limitations of the study, and ethical considerations.

3.1 Research design

Research design refers to the overall plan that guides how a study is carried out, including how data is collected, measured, and analyzed in order to answer the research questions (Creswell & Creswell, 2023). In this study, the researcher adopted a cross-sectional research design to investigate the impact of poaching on wildlife population and tourism viability in Murchison Falls National Park.

The use of a cross-sectional design was appropriate because it enabled the researcher to gather information from respondents at a single point in time. It was also cost-effective, less time-consuming, and suitable for comparing different categories of respondents within the study area (Bryman, 2022).

3.2 Study population

A study population refers to the entire group of individuals who are relevant to the research and from whom data can be obtained (Creswell & Poth, 2022). It includes all individuals who share characteristics related to the research problem.

The study targeted a population of 70 respondents, comprising Uganda Wildlife Authority staff, park rangers, tour operators, tourists, conservation officers, and local community members living near Murchison Falls National Park. These respondents were considered appropriate because they are directly or indirectly involved in wildlife conservation and tourism activities.

3.3 Sample Size

Sample size is defined as the number of participants selected from the total population to take part in a study (Taherdoost, 2023). Determining an appropriate sample size is important to ensure that the findings are reliable and representative.

In this study, the sample size was determined using the (Krejcie, R.V. & Morgan, 1970) table. From a total population of 70 respondents, a sample of 59 respondents was selected to participate in the study.

3.4 Sampling method

The study employed a combination of purposive sampling and simple random sampling techniques to select respondents.

Purposive sampling was applied when selecting respondents with specific knowledge and experience, such as UWA staff, park rangers, and conservation officers. On the other hand, simple random sampling was used to select respondents such as tourists and community members to ensure that every individual had an equal chance of being included in the study.

These sampling techniques were chosen because they helped to obtain relevant information while minimizing bias and saving time and resources (Etikan & Bala, 2022).

Table 1 3.1: Showing sample size of respondents

Category of respondents	Targeted population	Sample size	Sampling techniques
UWA staff	10	8	Purposive sampling
Park rangers	10	8	Purposive sampling
Tour operators	10	8	Purposive sampling
Tourists	10	10	Random sampling
Community members	20	15	Random sampling
Conservation officers	10	10	Purposive sampling
Total	**70**	**59**	

Source: Murchison Falls National Park Report 2025

3.5.0 Type of data

3.5.1 Primary data

Primary data refers to information that is collected directly by the researcher for the purpose of addressing the research problem (Creswell & Poth, 2022).

In this study, primary data were obtained through the use of structured questionnaires administered to selected respondents. This enabled the researcher to gather firsthand information on poaching practices, wildlife population changes, and their influence on tourism viability.

3.5.2 Secondary data

Secondary data refers to information that has already been collected by other researchers or institutions for different purposes but can be used to support a new study (Bryman, 2022).

For this study, secondary data was obtained from sources such as academic journals, books, government reports, Uganda Wildlife Authority publications, and online resources. This information provided background knowledge and supported the interpretation of the study findings.

3.6 Data collection methods

The study employed structured questionnaires as the main method of data collection. These questionnaires consisted of closed-ended questions that required respondents to select answers based on their level of agreement.

The questionnaire was designed using a five-point Likert scale, where 5 represented strongly agree, 4 agree, 3 neutral, 2 disagree, and 1 strongly disagree. This approach was preferred because it simplified data collection, enhanced consistency in responses, and made analysis easier (Bhat, 2023).

3.7 Data analysis plan

Data analysis involves organizing and examining collected data in order to draw meaningful conclusions (Babbie, 2022).

In this study, the collected data were edited, coded, and entered into the Statistical Package for Social Sciences (SPSS) for analysis. Regression analysis was used to determine the relationship

between poaching and the dependent variables, which were wildlife population and tourism viability.

3.8 Data analysis technique and methods

After data collection, the responses were organized, coded, and presented in tables for easier interpretation.

Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize the data. In addition, correlation analysis was conducted to determine the strength and direction of relationships among the study variables.

All data analysis was carried out using SPSS version 26, which is widely used for its accuracy and efficiency in handling quantitative data (Field, 2023).

3.9 Research Reliability and Validity

Research Reliability

Reliability refers to the consistency of a research instrument in producing similar results when used under the same conditions (Trochim, 2022).

To ensure reliability, the study used Cronbach's alpha to test the internal consistency of the questionnaire. A reliability coefficient of 0.7 or higher was considered acceptable.

Research Validity

Validity refers to the extent to which a research instrument measures what it is intended to measure (Bryman, 2022).

To ensure validity, the questionnaire was reviewed by the research supervisor and other experts before it was administered to respondents. Their feedback helped to improve the clarity and relevance of the questions.

3.10 Limitations of the study

One of the major limitations was time constraints, as the researcher had to balance academic work with the research process.

Financial limitations also arose due to costs associated with data collection, transportation, printing, and internet access. Additionally, some respondents may have provided biased or incomplete information, which could have affected the accuracy of the results.

3.11 Ethical considerations

The researcher obtained an official introductory letter from the university to seek permission from relevant authorities before conducting the study in Murchison Falls National Park.

Confidentiality was maintained by ensuring that respondents' identities were not disclosed. Participants were also informed that the information they provided would be used strictly for academic purposes.

Participation in the study was voluntary, and respondents were free to withdraw at any time. The researcher ensured honesty, objectivity, and professionalism throughout the research process.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents the results of data analysis and interpretation of the researcher's findings. For this study, data analysis and interpretation of findings are guided by the following study objectives:

I. To find out the level and forms of poaching in Murchison Falls National Park.
II. To find out the effect of poaching on wildlife population dynamics in the park.
III. To find out the impact of wildlife population changes on tourism viability.

4.1 Response Rate

The results are displayed in the table below. The researcher distributed 59 questionnaires, and all of them were returned, indicating a 100% response rate.

Table 2 4.1: Response Rate

Response Category	**Frequency**	**Percent (%)**
Returned Questionnaires	59	100
Unreturned Questionnaires	0	0
Total	**59**	**100**

The findings indicate that all the questionnaires distributed to respondents were returned, giving a response rate of 100%. This response rate was considered adequate and representative enough for analysis and interpretation of findings.

4.2 Demographic Information of Respondents

This section presents demographic characteristics of respondents including age bracket, education level, role at Murchison Falls National Park, and duration of interaction with the park.

4.2.1 Age Bracket of Respondents

Table 3 4.2: Age Distribution of Respondents

Age group (years)	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
18-33	18	30.5	30.5	30.5
34-44	7	11.9	11.9	42.4
45-54	20	33.9	33.9	76.3
55 and above	14	23.7	23.7	100.0
Total	**59**	**100.0**	**100.0**	

The findings reveal that majority of respondents were aged between 45–54 years represented by 33.9%, followed by those aged between 18–33 years represented by 30.5%, those aged 55 years and above represented by 23.7%, while those aged between 34–44 years constituted 11.9%. This implies that the study captured information from a mature and experienced group of respondents who possessed adequate knowledge concerning poaching, wildlife conservation, and tourism activities at Murchison Falls National Park.

4.2.2 Education Level of Respondents

Table 4 4.3: Education Level of Respondents

Education Level	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
No formal education	13	22.0	22.0	22.0
Certificate	12	20.3	20.3	42.4
Diploma	10	16.9	16.9	59.3
Degree	12	20.3	20.3	79.7
Master's and above	12	20.3	20.3	100.0
Total	**59**	**100.0**	**100.0**	

The findings indicate that majority of respondents had no formal education represented by 22.0%, followed by those with certificate qualifications represented by 20.3%, those with degree qualifications represented by 20.3%, those with Master's and above represented by 20.3%, while those with diploma qualifications constituted 16.9%. This implies that although a significant proportion of respondents had no formal education, the majority possessed some level of formal education, making them knowledgeable enough to provide reliable information concerning poaching, wildlife population dynamics, and tourism viability at Murchison Falls National Park.

4.2.3 Role of Respondents at Murchison Falls National Park

Table 5 4.4: Role of Respondents at Murchison Falls National Park

Role Category	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
UWA staff	9	15.3	15.3	15.3
Tourist	8	13.6	13.6	28.8
Tour operator	8	13.6	13.6	42.4
Park ranger	19	32.2	32.2	74.6
Community member	6	10.2	10.2	84.7
Conservation officer	9	15.3	15.3	100.0
Total	**59**	**100.0**	**100.0**	

The findings indicate that majority of respondents were park rangers represented by 32.2% followed by UWA staff and conservation officers each represented by 15.3%, tourists and tour operators each represented by 13.6%, while community members constituted 10.2%. This implies that the study obtained information from respondents directly involved in wildlife conservation, law enforcement, and tourism activities at Murchison Falls National Park, which enhanced the credibility and relevance of the findings.

4.2.4 Duration of Interaction with Murchison Falls National Park

Table 6 4.5: Duration of Interaction with Murchison Falls National Park

Duration (years)	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Less than 1 year	9	15.3	15.3	15.3
1-3 Years	18	30.5	30.5	45.8
3-5 Years	18	30.5	30.5	76.3
Over 5 years	14	23.7	23.7	100.0
Total	**59**	**100.0**	**100.0**	

The findings reveal that majority of respondents had interacted with the park for 1-3 years and 3-5 years each represented by 30.5%, followed by those with over 5 years of interaction represented by 23.7%, while those with less than 1 year of interaction constituted 15.3%. This implies that respondents had sufficient experience and exposure to the park's wildlife conservation and tourism activities, making them well-placed to provide reliable information on poaching, wildlife population dynamics, and tourism viability.

4.3 Descriptive Statistics

This section presents findings according to the study objectives using frequencies, percentages, means and standard deviations.

The interpretation of means was based on the following scale;

4.21–5.00 = Strongly Agree

3.41–4.20 = Agree

2.61–3.40 = Neutral

1.81–2.60 = Disagree

1.00–1.80 = Strongly Disagree

4.3.1 Level and Forms of Poaching in Murchison Falls National Park

Table 7 4.6: Level and Forms of Poaching in Murchison Falls National Park

Statement	Frequency	Percent (%)	Mean	Std. Dev.	Interpretation
Illegal hunting of wildlife occurs frequently in the park	59	100	3.25	1.31	Neutral
Wire snaring is one of the most common methods used by poachers	59	100	3.37	1.20	Neutral
Poaching for bushmeat is practiced by surrounding communities	59	100	3.29	1.17	Neutral
Commercial poaching (for trade in wildlife products) exists in the park	59	100	3.39	1.24	Neutral
Use of illegal firearms contributes to wildlife poaching	59	100	3.34	1.25	Neutral
Poverty among nearby communities contributes to poaching	59	100	3.20	1.25	Neutral
Weak enforcement of wildlife laws encourages poaching activities	59	100	3.29	1.19	Neutral
Human-wildlife conflict leads to retaliatory killing of animals	59	100	3.22	1.09	Neutral
Poaching activities have persisted despite conservation efforts	59	100	3.25	1.15	Neutral
There is adequate awareness about the negative effects of poaching	59	100	3.36	1.30	Neutral

Grand Mean: 3.30: 1.22: Neutral

The findings in Table 4.6 revealed that respondents were neutral regarding the level and forms of poaching in Murchison Falls National Park with a grand mean of 3.30. Respondents were neutral on all statements, with the highest mean recorded for commercial poaching (mean = 3.39) and wire snaring (mean = 3.37), while the lowest mean was recorded for poverty among nearby communities (mean = 3.20). The study findings imply that although poaching exists in various forms within the park, respondents did not strongly agree or disagree on its prevalence, suggesting that poaching activities may occur at moderate levels or that respondents had varying perceptions about the extent of poaching in the park. These findings are consistent with the literature reviewed in Chapter Two which indicated that poaching remains a major challenge to wildlife conservation across the world, taking different forms such as illegal hunting, snaring, bushmeat trade, and wildlife trafficking.

4.3.2 Effect of Poaching on Wildlife Population Dynamics in the Park

Table 8 4.7: Effect of Poaching on Wildlife Population Dynamics in Murchison Falls National Park

Statement	Frequency	Percent (%)	Mean	Std. Dev.	Interpretation
Poaching has led to decline in wildlife species	59	100	3.39	1.25	Neutral
Large mammals (like elephants, lions) are more affected by poaching	59	100	3.22	1.20	Neutral
Poaching has increased wildlife mortality rates in the park	59	100	3.27	1.30	Neutral
Wildlife distribution within the park has changed due to poaching pressure	59	100	3.44	1.23	Agree
Poaching disrupts breeding and reproduction of wildlife species	59	100	3.32	1.19	Neutral

Biodiversity in the park has reduced due to illegal hunting activities	59	100	3.22	1.32	Neutral
Removal of key species affects the ecological balance of the park	59	100	3.29	1.20	Neutral
Some wildlife species are becoming rare or endangered due to poaching	59	100	3.32	1.38	Neutral
Wildlife population recovery is slow due to continued poaching	59	100	3.32	1.40	Neutral
Conservation efforts have significantly restored wildlife populations	59	100	3.37	1.21	Neutral

Grand Mean: 3.32: 1.27: Neutral

The findings in Table 4.7 revealed that respondents were neutral regarding the effect of poaching on wildlife population dynamics in Murchison Falls National Park with a grand mean of 3.32. Respondents agreed that wildlife distribution within the park had changed due to poaching pressure (mean = 3.44), while they were neutral on all other statements. The study findings imply that although poaching affects wildlife populations in various ways, respondents did not strongly agree that poaching had significantly impacted wildlife population dynamics, suggesting that conservation efforts may have contributed to stabilizing wildlife populations in the park. These findings are consistent with the literature reviewed in Chapter Two which indicated that poaching has significant effects on wildlife population dynamics, including reductions in species abundance, increased mortality rates, and disruption of ecological systems.

4.3.3 Impact of Wildlife Population Changes on Tourism Viability

Table 9 4.8: Impact of Wildlife Population Changes on Tourism Viability

Statement	Frequency	Percent (%)	Mean	Std. Dev.	Interpretation
Availability of wildlife influences tourists' decision to visit the park	59	100	3.27	1.20	Neutral
Declining wildlife populations reduce tourist satisfaction	59	100	3.24	1.24	Neutral
Fewer wildlife sightings negatively affect visitor experience	59	100	3.44	1.23	Agree
Reduction in wildlife leads to decreased tourist arrivals	59	100	3.44	1.25	Agree
Poaching indirectly reduces tourism revenue in the park	59	100	3.31	1.20	Neutral
Wildlife decline affects the competitiveness of the park as a tourist destination	59	100	3.25	1.15	Neutral
Tourist length of stay is influenced by wildlife availability	59	100	3.31	1.30	Neutral
Repeat visits by tourists depend on quality of wildlife experiences	59	100	3.51	1.14	Agree
Conservation of wildlife enhances tourism sustainability	59	100	3.34	1.21	Neutral
Tourism in the park remains strong despite wildlife decline	59	100	3.42	1.13	Agree

Grand Mean: 3.35: 1.20: Neutral

The findings in Table 4.8 revealed that respondents were neutral regarding the impact of wildlife population changes on tourism viability with a grand mean of 3.35. Respondents agreed that fewer wildlife sightings negatively affect visitor experience (mean = 3.44), reduction in wildlife leads to decreased tourist arrivals (mean = 3.44), repeat visits by tourists depend on quality of wildlife experiences (mean = 3.51), and tourism in the park remains strong despite wildlife decline (mean = 3.42). The study findings imply that although wildlife population changes affect tourism viability, the impact may not be severe enough to significantly undermine tourism performance, as tourists continue to visit the park and tourism remains relatively strong. These findings are consistent with the literature reviewed in Chapter Two which indicated that wildlife populations play a critical role in determining tourism viability, particularly in destinations that rely on nature-based tourism.

4.4 Correlation Analysis

In order to determine the extent and direction of relationship between the independent and dependent variables, Pearson correlation analysis was used and the results summarised as below.

4.4.1 Correlation between Poaching and Wildlife Population Dynamics

Table 10 4.9: Pearson Correlation Analysis for Study Variables

Variables	r-value	Sig. Value	Interpretation
Poaching vs Wildlife Population Dynamics	0.752**	0.000	Strong Positive Relationship

The findings revealed that poaching had a strong positive relationship with wildlife population dynamics. This implies that increased poaching activities are associated with significant changes in wildlife population dynamics, including declines in species abundance, increased mortality rates, and disruption of ecological balance within Murchison Falls National Park.

4.4.2 Correlation between Poaching and Tourism Viability

Table 11 4.10: Pearson Correlation Analysis for Study Variables

Variables	r-value	Sig. Value	Interpretation
Poaching vs Tourism Viability	0.684**	0.001	Strong Positive Relationship

The findings revealed that poaching had a strong positive relationship with tourism viability. This implies that poaching activities significantly influence tourism viability, as reduced wildlife populations resulting from poaching negatively affect tourist satisfaction, visitation rates, and revenue generation within Murchison Falls National Park.

4.4.3 Correlation between Wildlife Population Dynamics and Tourism Viability

Table 12 4.11: Pearson Correlation Analysis for Study Variables

Variables	r-value	Sig. Value	Interpretation
Wildlife Population Dynamics vs Tourism Viability	0.798**	0.000	Strong Positive Relationship

The findings revealed that wildlife population dynamics had a strong positive relationship with tourism viability. This implies that changes in wildlife populations, including species abundance, diversity, and distribution, significantly influence the viability of tourism, as the availability and quality of wildlife experiences determine tourist satisfaction, visitation rates, and overall tourism performance within Murchison Falls National Park.

4.5 Regression Analysis

A regression analysis was conducted to determine the predictive power of poaching on wildlife population dynamics and tourism viability.

4.5.1 Model Summary

Table 13 4.12: Model Summary

R	R Square	Adjusted R Square	Std. Error
0.824	0.679	0.668	0.418

The findings indicate that the independent variables explain 67.9% of the variance in wildlife population dynamics and tourism viability. This means that poaching significantly influences both wildlife population dynamics and tourism viability at Murchison Falls National Park.

4.5.2 ANOVA Results

Table 14 4.13: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	22.847	2	11.424	59.892	0.000
Residual	10.683	56	0.191		
Total	**33.530**	**58**			

The regression model was statistically significant because the significance value was less than 0.05 ($p = 0.000$). This implies that poaching significantly predicts wildlife population dynamics and tourism viability in Murchison Falls National Park.

4.5.3 Regression Coefficients

Table 15 4.14: Regression Coefficients

VARIABLES	BETA	T-VALUE	SIG
Poaching vs Wildlife Population Dynamics	0.452	5.231	0.000
Poaching vs Tourism Viability	0.387	4.112	0.001

The findings indicate that poaching had a significant influence on wildlife population dynamics with a Beta value of 0.452 followed by tourism viability with a Beta value of 0.387. This implies that poaching exerts a stronger direct effect on wildlife population dynamics than on tourism viability, suggesting that the ecological consequences of poaching are more immediate, while the tourism impacts are mediated through wildlife population changes.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the discussion of the study findings, conclusion, recommendations, and limitations for the study and areas for further research.

5.1.0 Discussion of the Study Findings

5.1.1 Level and Forms of Poaching in Murchison Falls National Park

The findings indicate that respondents were neutral regarding the level and forms of poaching in Murchison Falls National Park, reflected by a grand mean of (Mean = 3.30) and a standard deviation of (SD = 1.22). Specifically, respondents were neutral on all statements, with the highest mean recorded for commercial poaching (Mean = 3.39) and wire snaring (Mean = 3.37), while the lowest mean was recorded for poverty among nearby communities (Mean = 3.20). These results suggest that although poaching exists in various forms within the park, respondents did not strongly agree or disagree on its prevalence, indicating that poaching activities may occur at moderate levels or that respondents had varying perceptions about the extent of poaching in the park.

Correlation analysis revealed a strong positive relationship between poaching and wildlife population dynamics ($r = 0.752$, $p = 0.000$), indicating that increased poaching activities are associated with significant changes in wildlife population dynamics. The statistically significant result confirms that this relationship is unlikely to be due to chance. Regression analysis further demonstrated that poaching is a significant predictor of wildlife population dynamics, with a beta coefficient of 0.452 ($\beta = 0.452$, $p = 0.000$). This indicates that a one-unit increase in poaching activities would correspond to a 45.2% change in wildlife population dynamics, holding other variables constant, underscoring its critical role at Murchison Falls National Park.

These findings align with UNEP (2022), who argued that poaching remains a major challenge to wildlife conservation across the world, taking different forms such as illegal hunting, snaring, bushmeat trade, and wildlife trafficking. Similarly, the Wildlife Conservation Society (2023) observed that snaring is one of the most widely used methods due to its affordability and effectiveness. This suggests that poaching activities at Murchison Falls National Park manifest

through various methods, with wire snaring and commercial poaching being among the most prevalent forms.

The study further supports Mudumba et al. (2022), who found that communities surrounding protected areas engage in illegal hunting for bushmeat as a source of livelihood. In the context of Murchison Falls National Park, respondents' neutral stance on poaching for bushmeat (Mean = 3.29) highlights the complex relationship between local communities and wildlife resources, where poverty and limited livelihood opportunities drive subsistence poaching. This is consistent with Uganda Wildlife Authority (2024), who noted that poaching practices are often associated with poverty, unemployment, and limited alternative income sources among local communities.

These findings are also in line with UNODC (2023), who found that wildlife crime has become more organized, involving cross-border networks that facilitate illegal trade in wildlife products. The neutral response regarding commercial poaching (Mean = 3.39) reflects the existence of organized illegal wildlife trade within the park, which has increased pressure on endangered species and intensified the scale of poaching activities. This suggests that both subsistence and commercial poaching coexist in the park, presenting complex challenges for conservation efforts.

The findings further corroborate the literature reviewed in Chapter Two, which indicated that poaching remains a major challenge to wildlife conservation across the world, taking different forms such as illegal hunting, snaring, bushmeat trade, and wildlife trafficking. The empirical evidence from this study confirms that these forms of poaching are present in Murchison Falls National Park, although respondents perceived them at moderate levels.

5.1.2 Effect of Poaching on Wildlife Population Dynamics in the Park

The second objective of the study was to find out the effect of poaching on wildlife population dynamics in the park. Findings revealed that respondents were neutral regarding the effect of poaching on wildlife population dynamics, reflected in a grand mean of (Mean = 3.32; SD = 1.27). Respondents agreed that wildlife distribution within the park had changed due to poaching pressure (Mean = 3.44), while they were neutral on all other statements. The study findings imply that although poaching affects wildlife populations in various ways, respondents did not strongly agree that poaching had significantly impacted wildlife population dynamics, suggesting that conservation efforts may have contributed to stabilizing wildlife populations in the park.

Correlation analysis demonstrated a strong positive and statistically significant relationship between poaching and wildlife population dynamics ($r = 0.752$, $p = 0.000$), indicating that increased poaching activities substantially contribute to changes in wildlife populations. Regression results further confirmed that poaching significantly influences wildlife population dynamics, with a beta coefficient of 0.452 ($\beta = 0.452$, $p = 0.000$), suggesting that poaching accounts for approximately 45.2% of the variation in wildlife population dynamics when controlling for other variables. Collectively, poaching explained 67.9% of the variation in wildlife population dynamics and tourism viability ($R^2 = 0.679$), with the overall regression model being statistically significant ($F = 59.892$, $p = 0.000$).

These findings highlighted the substantial impact of poaching on wildlife population dynamics through mechanisms such as decline in species abundance, increased mortality rates, disruption of breeding and reproduction, and alteration of spatial distribution. The results align with IFAW (2024), who observed that illegal hunting directly reduces wildlife populations and affects their natural reproduction processes. Similarly, Wildlife Conservation Society Uganda (2024) emphasized that poaching disproportionately affects large mammals, which are key components of wildlife tourism. The study's finding that large mammals are more affected by poaching (Mean = 3.22) supports the assertion that poaching poses a significant threat to flagship species such as elephants and lions.

Furthermore, the recognition that wildlife distribution within the park has changed due to poaching pressure (Mean = 3.44) concurs with Global Conservation (2024), who argued that the removal of key species disrupts food chains and ecological balance, leading to long-term environmental consequences. This is echoed by UNEP (2023), which reported that poaching affects biodiversity by altering species composition and ecosystem stability. At Murchison Falls National Park, the changing distribution of wildlife due to poaching pressure has implications for ecological balance and the overall health of the ecosystem. Supporting this, UWA (2024) noted that although conservation efforts have contributed to recovery, illegal activities such as snaring continue to threaten wildlife populations in the park.

The findings further corroborate the literature reviewed in Chapter Two, which indicated that poaching has significant effects on wildlife population dynamics, including reductions in species abundance, increased mortality rates, and disruption of ecological systems. The empirical evidence

from this study confirms that these effects are observable in Murchison Falls National Park, particularly in terms of changing wildlife distribution patterns.

5.1.3 Impact of Wildlife Population Changes on Tourism Viability

The study's findings highlighted the impact of wildlife population changes on tourism viability, as evidenced by a grand mean of (Mean = 3.35). Respondents agreed that fewer wildlife sightings negatively affect visitor experience (Mean = 3.44), reduction in wildlife leads to decreased tourist arrivals (Mean = 3.44), repeat visits by tourists depend on quality of wildlife experiences (Mean = 3.51), and tourism in the park remains strong despite wildlife decline (Mean = 3.42). These results align with WTTC (2024), which underscores that the availability and diversity of wildlife species significantly influence tourist satisfaction, visitation rates, and revenue generation.

The emphasis on the relationship between wildlife population changes and tourism viability corresponds with The World Bank (2023), who demonstrated that reduced wildlife sightings lead to lower tourist satisfaction and decreased visitation. Further, the findings resonate with UNEP (2022), who argued that biodiversity loss reduces the competitiveness of tourism destinations. Similarly, MTWA and UBOS (2024), stress that wildlife-based tourism contributes significantly to the economy, and declining wildlife populations due to poaching threaten the sustainability of this sector.

The value placed on repeat visits depending on quality of wildlife experiences is also supported by WTTC (2023), who advocates that tourism viability depends on factors such as visitor satisfaction, length of stay, and repeat visits, all of which are influenced by the quality of wildlife experiences. In the context of Murchison Falls National Park, respondents' agreement that tourism remains strong despite wildlife decline (Mean = 3.42) suggests that the park's tourism sector has demonstrated resilience, potentially due to other attractions such as the falls themselves, or that the impacts of wildlife decline are not yet severe enough to significantly undermine tourism performance.

Correlation analysis further demonstrated a strong positive relationship between wildlife population dynamics and tourism viability ($r = 0.798$, $p = 0.000$), indicating that changes in wildlife populations, including species abundance, diversity, and distribution, significantly influence the viability of tourism. The regression results confirmed that poaching significantly influences tourism viability with a beta coefficient of 0.387 ($\beta = 0.387$, $p = 0.001$), suggesting that the

ecological consequences of poaching are more immediate, while the tourism impacts are mediated through wildlife population changes.

The findings further corroborate the literature reviewed in Chapter Two, which indicated that wildlife populations play a critical role in determining tourism viability, particularly in destinations that rely on nature-based tourism. The empirical evidence from this study confirms that wildlife population changes at Murchison Falls National Park influence tourism viability through their effects on visitor experience, tourist arrivals, and repeat visitation.

5.2 Conclusions

Based on the findings of the study, the chapter presents the following conclusions based on the study objectives in order to understand the impact of poaching on wildlife populations and tourism viability.

5.2.1 Level and Forms of Poaching in Murchison Falls National Park

The statistical analysis revealed that respondents were neutral regarding the level and forms of poaching in the park, with a grand mean of 3.30. Correlation results showed a strong, positive, and statistically significant relationship between poaching and wildlife population dynamics ($r = 0.752$, $p = 0.000$), indicating that increased poaching activities are closely linked to changes in wildlife populations. Regression analysis confirmed that poaching is a significant predictor of wildlife population dynamics ($\beta = 0.452$, $p = 0.000$), highlighting it as a major driver of ecological change at Murchison Falls National Park. The study concludes that although poaching exists in various forms including illegal hunting, wire snaring, bushmeat poaching, commercial poaching, and use of illegal firearms, respondents had varying perceptions about its prevalence. The findings suggest that poaching activities occur at moderate levels within the park, with wire snaring and commercial poaching being among the most common methods employed by poachers. These practices are driven by factors such as poverty among nearby communities, weak enforcement of wildlife laws, and human-wildlife conflict, which perpetuate illegal hunting activities despite ongoing conservation efforts.

5.2.2 Effect of Poaching on Wildlife Population Dynamics in the Park

The study identified that respondents were neutral regarding the effect of poaching on wildlife population dynamics, with a grand mean of 3.32. Correlation analysis demonstrated a strong positive relationship between poaching and wildlife population dynamics ($r = 0.752$, $p = 0.000$), indicating that increased poaching is linked to significant changes in wildlife populations. Regression analysis further confirmed that poaching significantly influences wildlife population dynamics ($\beta = 0.452$, $p = 0.000$). While respondents did not strongly agree that poaching had significantly impacted wildlife populations, the correlation and regression results indicate a substantial statistical relationship. The study concludes that poaching affects wildlife population dynamics through declines in species abundance, increased mortality rates, disruption of breeding and reproduction, and changes in spatial distribution. Large mammals such as elephants and lions are particularly affected, and the removal of key species disrupts the ecological balance of the park. Although conservation efforts have contributed to some recovery, continued poaching slows wildlife population recovery and threatens biodiversity within Murchison Falls National Park.

5.2.3 Impact of Wildlife Population Changes on Tourism Viability

Correlation analysis demonstrated a strong positive relationship between wildlife population dynamics and tourism viability ($r = 0.798$, $p = 0.000$), while regression analysis confirmed that poaching significantly influences tourism viability ($\beta = 0.387$, $p = 0.001$). These findings emphasize that wildlife population changes significantly affect tourism viability. The study thus concludes that the long-term sustainability of tourism at Murchison Falls National Park depends on maintaining healthy wildlife populations. Respondents agreed that fewer wildlife sightings negatively affect visitor experience, reduction in wildlife leads to decreased tourist arrivals, repeat visits depend on quality of wildlife experiences, and tourism in the park remains strong despite wildlife decline. The findings suggest that although wildlife population changes affect tourism viability, the impact may not yet be severe enough to significantly undermine tourism performance, as tourists continue to visit the park and tourism remains relatively strong.

5.3 Recommendations

5.3.1 Level and Forms of Poaching in Murchison Falls National Park

The study advocates for strengthened anti-poaching enforcement by policymakers, including the Uganda Wildlife Authority and the Ministry of Tourism, Wildlife and Antiquities, to combat the various forms of poaching identified in the park. It emphasizes the need for increased funding for park rangers, modern surveillance technologies, and intelligence-led operations to detect and deter illegal hunting, wire snaring, and commercial poaching activities. Additionally, community engagement initiatives should be enhanced to address the root causes of poaching, particularly poverty among nearby communities. The study highlights the value of providing alternative livelihood opportunities, such as sustainable agriculture, eco-tourism enterprises, and skills development programs, to reduce dependence on illegal hunting for bushmeat and wildlife products. The study also recommends strengthening wildlife laws and enforcement mechanisms, including stiffer penalties for poaching offenses, to deter potential offenders and disrupt organized wildlife trafficking networks operating within and around the park.

5.3.2 Effect of Poaching on Wildlife Population Dynamics

The study recommends that policymakers and conservation organizations prioritize wildlife population monitoring and research to better understand the dynamics of species affected by poaching. It advises the Uganda Wildlife Authority and research institutions to implement regular wildlife censuses, track population trends, and assess the effectiveness of conservation interventions in restoring wildlife populations. Additionally, it calls for strengthening habitat protection and anti-poaching patrols in areas where wildlife populations are most vulnerable, particularly for large mammals such as elephants and lions. The study underscores the importance of addressing human-wildlife conflict through community-based conflict mitigation strategies, including the construction of barriers, early warning systems, and compensation schemes for livestock losses, to reduce retaliatory killing of wildlife. Finally, the study recommends enhancing conservation education and awareness programs to promote coexistence between local communities and wildlife, thereby reducing poaching pressure on wildlife populations.

5.3.3 Impact of Wildlife Population Changes on Tourism Viability

The study recommends that tourism stakeholders, including the Uganda Tourism Board, tour operators, and park management, develop strategies to diversify tourism products and experiences to reduce over-reliance on wildlife sightings. Heritage managers and tourism practitioners should invest in promoting other attractions within Murchison Falls National Park, such as the falls themselves, boat cruises, bird watching, and cultural experiences, to maintain tourist interest even when wildlife sightings are limited. Additionally, visitor education programs should be strengthened to manage tourist expectations and enhance appreciation of the park's broader natural and cultural assets. The adoption of sustainable tourism practices, including responsible wildlife viewing guidelines, visitor capacity management, and environmental conservation initiatives, is also essential for minimizing the negative impacts of tourism while preserving wildlife populations and ensuring the long-term sustainability of tourism at Murchison Falls National Park.

5.4 Limitations of the Study

Despite the successful completion of this study, several limitations may have influenced the findings and should be considered when interpreting the results. The study was conducted within a limited timeframe, which restricted extensive engagement with a broader range of stakeholders and limited opportunities for follow-up interactions. In addition, the reliance on self-reported questionnaire data may have introduced respondent bias through socially desirable responses or selective disclosure of information. The study was also confined to Murchison Falls National Park, which limits the generalizability of the findings to other protected areas with different contextual characteristics. Furthermore, the cross-sectional design captured data at a single point in time, making it difficult to assess changes in poaching levels, wildlife populations, and tourism viability over time. Nevertheless, appropriate research procedures were followed to ensure the collection of reliable data and the achievement of the study objectives.

5.5 Areas for Further Research

Future researchers should undertake similar studies in other protected areas in Uganda, such as Queen Elizabeth National Park, Kidepo Valley National Park, and Bwindi Impenetrable National Park, to explore whether the patterns identified in this study hold true across diverse wildlife

tourism contexts. Comparative research across different destinations is essential to broaden the applicability of findings related to poaching's impact on wildlife populations and tourism viability. Employing longitudinal approaches will also be valuable to track changes over time in poaching activities, wildlife population dynamics, and tourism performance, offering deeper insight into the lasting impacts of poaching and conservation efforts. Additionally, further investigation into the role of emerging technologies like drone surveillance, GPS tracking, and artificial intelligence in anti-poaching efforts can reveal how innovation enhances wildlife protection and supports the sustainability of nature-based tourism.

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Appendix ii: Questionnaires

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FACULTY OF MANAGEMENT SCIENCES BACHELOR OF

TOURISM AND TRAVEL MANAGEMENT

Research Questionnaires

Research Titles: The Impact of Poaching on Wildlife Population and Tourism Viability: A Case Study of Murchison Falls National Park, Masindi District.

Researcher: Mulasa Solomon

Registration Number: BU/UG/2023/2468

Dear Respondent,

I am a student of Busitema University conducting a research study to examin The Impact of Poaching on Wildlife Population and Tourism Viability in Murchison Falls National Park, Masindi District. Therefore, this questionnaire aims to gather primary data to support the study.

Your participation is highly valued and voluntary. Please take a few minutes to respond truthfully. Your responses will be kept strictly confidential and used only for academic purposes.

Instructions:

- Tick [✓] where appropriate.
- Sections B to E use a 5-point Likert scale:
    - **SA – Strongly Agree**,
    - **A – Agree**,
    - **N – Neutral**,

- **D – Disagree**,
- **SD – Strongly Disagree**

SECTION A: RESPONDENT BACKGROUND INFORMATION

1. **Gender:**
   ☐ Male ☐ Female
2. **Age Bracket:**
   ☐ 18–33 ☐ 4–44 ☐ 5–54 ☐ & above
3. **Highest Level of Education:**
   ☐ Degree ☐ ertificate ☐ iploma

   ☐ Master's or above ☐ No Formal Education
4. **Your Role in/around Murchison Falls National Park:**
   ☐ UWA Staff ☐ Tourist ☐ Tour Operator ☐ Park Ranger

   ☐ Community Member ☐ onservation Officer
5. **Period of interaction with the park:**
   ☐ Less than 1 year ☐ 1–3 years ☐ 3–5 years ☐ Over 5 years

SECTION B: Level and Forms of Poaching in Murchison Falls National Park

S/N	Statements	SA	A	N	D	SD
P1	Illegal hunting of wildlife occurs frequently in the park					
P2	Wire snaring is one of the most common methods used by poachers					
P3	Poaching for bushmeat is practiced by surrounding communities					

P4	Commercial poaching (for trade in wildlife products) exists in the park					
P5	Use of illegal firearms contributes to wildlife poaching					
P6	Poverty among nearby communities contributes to poaching					
P7	Weak enforcement of wildlife laws encourages poaching activities					
P8	Human-wildlife conflict leads to retaliatory killing of animals					
P9	Poaching activities have persisted despite conservation efforts					
P10	There is adequate awareness about the negative effects of poaching					

SECTION C: Effect of Poaching on Wildlife Population Dynamics

S/N	**Statements**	**SA**	**A**	**N**	**D**	**SD**
W1	Poaching has led to a decline in the number of wildlife species in the park					
W2	Large mammals (like elephants, lions) are more affected by poaching					
W3	Poaching has increased wildlife mortality rates in the park					
W4	Wildlife distribution within the park has changed due to poaching pressure					
W5	Poaching disrupts breeding and reproduction of wildlife species					
W6	Biodiversity in the park has reduced due to illegal hunting activities					
W7	Removal of key species affects the ecological balance of the park					

W8	Some wildlife species are becoming rare or endangered due to poaching					
W9	Wildlife population recovery is slow due to continued poaching					
W10	Conservation efforts have significantly restored wildlife populations					

SECTION: D: Impact of Wildlife Population Changes on Tourism Viability

S/N	Statements	SA	A	N	D	SD
T1	Availability of wildlife influences tourists' decision to visit the park					
T2	Declining wildlife populations reduce tourist satisfaction					
T3	Fewer wildlife sightings negatively affect visitor experience					
T4	Reduction in wildlife leads to decreased tourist arrivals					
T5	Poaching indirectly reduces tourism revenue in the park					
T6	Wildlife decline affects the competitiveness of the park as a tourist destination facilities					
T7	Tourist length of stay is influenced by wildlife availability					
T8	Repeat visits by tourists depend on quality of wildlife experiences					
T9	Conservation of wildlife enhances tourism sustainability					

T10	Tourism in the park remains strong despite wildlife decline					

Thank you for your time and cooperation!

Your participation is greatly appreciated. If you have any questions or concerns, please feel free to contact me through the details provided by the university.

Appendix iii: Research Work plan

Activity	**JAN**	**FEB**	**MARCH**	**APRIL**	**MAY**	**JUNE**
Research Problem Identification						
Approving the research topic						
Writing the research Proposal						
Approving the Research Proposal						
Collecting data from the field						
Analysis and interpreting data						
Writing final research report						
Submitting final research report						

Appendix iv: Research Budget

ITEM	QUANTITY	UNIT PRICE	AMOUNT (shs)
Internet (Data)	-	120,000	120,000
Data collection Assistants	2	20,000	40,000
Typing and editing the report	-	60,000	60,000
Printing and bidding	3 proposal 3 Reports	135,000	135,000
Transport to my case study		80,000	80,000
Meals and accommodation		120,000	120,000
Data analysis and interpretation		80,000	80,000
Total			**635,000shs**

Appendix iv: Krejcie and Morgan sample size table

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970