

## Original paper

# Effect of sport hunting on wildlife conservation in Rurambira and Nyakahita parishes, Nyakashashara sub county, Kiruhura District

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Received 5 January 2023; Accepted 8 February 2023; Published 28 February 2023

**ABSTRACT:** The study was conducted to determine the effect of sport hunting on wildlife conservation. A cross-sectional design was used for the survey. Given the stratified structure of respondents, the strategy was chosen since it allowed for simultaneous interaction with many groups. The study population consisted of sport hunting companies, district local government officials, UWA officials and local community members. The instruments and methods of data collection that were used in this study included the structured questionnaires. Content analysis was the main technique for data analysis. The data was classified, tallied, and totaled according to the objectives of the study. Quantitative data was tabulated and converted into frequencies and percentages to fit the objectives of the study. Data was subjected to content analysis in which the main themes were identified, analyzed, and presented in relation to the objective of the study. The analysis of the data collected was done in stages. Results showed an association between the decrease in poaching and advancements in animal conservation that is statistically marginally favorable because of the decline in poaching ( $r = 0.271^{**}$ ;  $p = 0.000$ ). The belief that sport hunting is done to raise money for wildlife conservation has a moderately significant statistical relationship with wildlife conservation ( $r = 0.301^{**}$ ;  $p = 0.001$ ). This is because the plan that makes sport hunting a source of income also contributes to improvements in wildlife conservation. sport hunting statistically strongly predicts wildlife conservation in a positive way ( $B = -0.255$ ;  $p = .000$ ). Inference suggests that an improvement in some areas of sport hunting led to an increase in wildlife conservation of 25.5%. Conclusively, results showed that wildlife conservation improves animal security, increases the possibility of obtaining foreign currency, benefits local populations by providing leisure and entertainment, and is a savior for the environment. According to the findings, there are still significant knowledge gaps regarding the justifications for sport hunting. The study's findings show a knowledge gap in terms of protecting animals. As a result, it is necessary to organize meetings that will allow the Lake Mburo national park increased sensitization. Officials must be aware of the value of wildlife for them to engage in the sale of goods generated from local resources.

**Keywords:** Wildlife conservation, sport hunting, Kiruhura District

## INTRODUCTION

For millennia, hunting has been a part of human history. Hunter-gatherers relied heavily on hunting for food and fur, but it also played an essential role in their rituals and as a display of strength. To kill wild animals, they mostly employed primitive means like as slings, snares, spears, nets, dogs, and occasionally bows and arrows (Hannis, 2017). Because the world's population was still low, this type of hunting had little effect on wildlife numbers. After European immigrants arrived in North America in the

1500s, hunting became more popular. Similarly, hunting grew in Africa in the 1800s as early explorers discovered a continent teeming with game. Wealthy Europeans accompanied them on hunting excursions, especially in Kenya (Nthiga *et al.*, 2015). The origins of sport hunting may be traced back to England and, subsequently, the United States of America in the early 1800s, when the concept of sportsmanship was incorporated into traditional hunting for meat, fur, and pest control (Bizri et

al., 2015). Sport hunting was then introduced in Africa in the early 1900s by explorers and colonial rulers venturing into Africa's heartland. These immigrants mostly engaged in unrestricted sport hunting, which had a negative impact on animal populations, eventually leading to an increasing awareness (Africa Union, 2017).

Several African countries, with support from international conservation and development organizations, have propagated sport hunting as a policy intervention to address livelihood as well as conservation concerns in and outside protected areas. For example, in Zimbabwe, sport hunting became part of the Community Areas Management Plan for Indigenous Resources (CAMPFIRE) Project, and in East, Central, and West Africa it was included in many forms of community conservation programmes (Muposhi *et al.*, 2016). Sport hunting was widely recognized as one market-oriented approach to helping the survival of wildlife, and it contributed to cash flows from payments made by sport hunters (tourists). Tourists had the objective of selecting and hunting animals with exceptional physical characteristics like large horns, tusks, enormous body size, and skull length, usually in the company of licensed professional hunting guides (Muposhi *et al.*, 2016).

One of the national industries that significantly contribute to 7.9% of the social, economic, and cultural advancement of Uganda as a whole, Western Uganda in general, and the Kiruhura area, is tourism (UBOS, 2018). The introduction of sport hunting in northern ranches near Lake Mburo National Park as a professional and ethical consideration of hunting and to promote the potential consequences of hunting for recreation and conservation purposes were new innovations that began occurring in the area due to tourism. Several sport hunting businesses, like Game Trails Ltd., among others, were presented (GTL Report, 2018).

The government has adopted several strategies to protect, preserve, and conserve nature, including aesthetic, flora, and fauna, including the National Forestry Authority, Environment Protection Unit, Police, and UPDF, among others. These ministries and government agencies include the Ministry of Tourism, Trade, and Industry, UWA, and others (UWA, 2015).

However, a lot of sport hunting was viewed by registered businesses as a substantial effort for wildlife conservation close to LMNP (Ministry of Tourism, Trade, and Industry Report, 2016). Sport hunting, according to reports from the neighborhood, does not actually help to conserve wildlife; on the contrary, it encourages poaching, scares off other animals, and causes certain rare species in the LMNP to become extinct. This has had a bad impact on the tourism industry in the northern pastures near LMNP. Local communities regard sport hunting adversely as a threat to animal conservation (UBOS, 2018).

Considering this, the researcher became interested in

the study to determine empirical finding for the activity of sport hunting and publicize the contributions of such businesses to the industry (UBOS, 2018).

## Literature Review

According to Catherine (2019), sport hunting is a traditional practice that dates back hundreds of years. Each year in the U.S., hundreds of thousands of wild animals around the world are killed by sport hunters. The hunters' primary motivation for sport hunting is simply to obtain animal parts (heads, hides, claws, or even the whole animal) for display and for bragging rights. The introduction of sport hunting around Rurambira and Nyakahita parishes benefits the local community in terms of employment, availability of money, the presence of food in the form of meat, and, above all, it creates incentives for the locals to tolerate wild animals without killing them. Catherine (2019)'s study was conducted in the USA, specifically tracing the origins of the concept "sport hunting". On the contrary, the current study seeks to connect sport hunting and wildlife conservation.

According to UWA (2015), the reason behind the sport hunting activity in Uganda is to provide an incentive to landowners to manage and protect wildlife on their land by giving wildlife as a resource an opportunity to demonstrate its economic value to landowners. Sport hunting also contributes towards a reduction in human-wildlife conflicts among the people living in Rurambira and Nyakahita parishes. The results by UWA (2015) present the circumstances surrounding Uganda as a whole. However, there are some factors which may be specific to Lake Mburo National Park and require a specific study. The difference in mindset that characterized communities cannot be generalized to all conservation centers. Therefore, the study was worthwhile conducting.

Similarly, Wanyama and Kisame (2015) state that sport hunting is implemented in wildlife conservation areas to prevent the depletion of wildlife resources, the usage of species and to regularize ecosystems. Sport hunting helps to regularize wildlife conservation efforts by, among other things, establishing harvest limits and methods, protecting wildlife habitat, educating the public, enforcing wildlife laws, researching wildlife ecology, and mitigating human-wildlife conflict. Collectively, these activities are termed "wildlife management." In this regard, in the case of Uganda, sports hunting companies like Game Trait Limited have helped in preventing wildlife conservation around Rurambira and Nyakahita parishes by setting hunting fees for different animal species. Wanyama and Kisame (2015) study is in line with the anticipations of the researcher in this study. However, it was not obvious that every one would think the same. This is why the study sought to rate items indicating the highest scoring item in the set of given implications.

Several countries on the African continent promote sport hunting to avoid animals developing bad habits. Sport hunting conserves wildlife species, habitats, and biodiversity. Sport hunting has an important role in African countries and it brings up a completely different set of issues. Some of those countries (Lindsey et al., 2016). This author enhances knowledge concerning the value of sport hunting across Africa. However, the scope of study was so large, thus, there is no tangible evidence to assume that the findings for Lindsey et al. (2016) cover even Lake Mbuoro National Park.

Sport hunting around LMNP is intended to ensure wildlife conservation. For example, in Uganda, UWA introduced the Uganda Wildlife Act Cap 200 to grant a one-year pilot sport-hunting use right license to a private company—Game Trails (U) Ltd (GTL). The license involved GTL entering into an agreement with UWA and the local community to reduce illegal hunting in the area and enable Uganda to retain its identity as a country blessed with rich biodiversity, especially wildlife (Game Trails Ltd Report, 2018). To ensure wider stakeholder involvement, the sport hunting project worked closely with the existing sub-county administration, local councils, and community protected area institutions (CPIs), whose roles were clearly spelt out. These results are from some years ago and events change. Thus, it is not okay to rely on the studies for 2018. This is why the study had to go on.

According to UWA (2015), sport hunting is conducted around the northern ranches of LMNP to ensure better management of wildlife populations so that those species with fewer animals can have higher prices. This can be achieved through consultations with local communities as the key actors. Uganda, for example, allowed the introduction of sport hunting as it is in line with the Wildlife Act of 2000 with the view of managing wildlife. Several Sub-Saharan African countries allow sport hunting to form attractive environments where hunting can take place (Nthiga et al., 2015). Equally, the studies here were conducted in 2015 and 2017. This thus did not stop the conduct of a current study to directly establish the implications of sport hunting on wildlife conservation. Southwick (2015) reviews that in several countries where there are no strong central governments; hunting can protect against civil unrest, poor food security, and avoid placing game populations in extreme jeopardy. Sport hunting saves the human population from exploiting game species and converts wildlife habitats into agricultural or other uses to meet their immediate needs of lack of food security. Finding ways in which natural habitats and wildlife can contribute positively to the food security of local human residents (including ecotourism, the development of natural products, and carbon crediting systems) will be essential to achieve a balance between the needs of human populations and their environments globally (Lamers et al., 2015).

The literature in this paragraph contains an explanation of how the balance between human beings and the animal population could be achieved. This is as opposed to the present study, which sought to investigate the implications of sport hunting on wildlife conservation at Lake Mbuoro National Park.

Sport hunting is furthermore conducted to scare the problem animals back into the protected area, capturing and translocating them and sensitizing the communities by shooting to chase. Individual animals that fail to return to the protected area may be spotted being hunted or killed to reduce the threat. Those killed in sport hunting generate revenue for the communities through the hunting fees, which in turn discourage poaching and contribute to conservation (UWA Report, 2015). This whole paragraph seeks to explain security as an aspect of wildlife conservation. However, there was a need to establish if this general observation applied even to the context of Lake Mbuoro National Park.

Sport hunting offers employment opportunities as guides and wildlife trackers to the locals who would have opted for poaching. With an increase in revenue among the locals, it improves their standards of living, hence reducing chances of poaching (Ochieng, 2018). In the event of this study, it was not clear if sport hunting promotes employment to people. This is because much as it could have been the case elsewhere, there was need to establish how it is in the context of Lake Mbuoro National Park.

According to Di (2016), sport hunting contributes to habitat protection, but evidence is equivocal about whether it has improved the fortunes of the species that it claims to protect. However, the net benefit of habitat protection and its associated biodiversity might outweigh this doubt. Advocates of hunting often claim that hunters are effective custodians of wildlife habitats, providing support for anti-poaching teams and preventing poaching by operating in an area. Additionally, although hunters are often instrumental in protecting species that they wish to hunt, this can sometimes be detrimental to habitats. Sport hunting, in these cases, exacerbates the conservation problem. However, it could also be part of the solution if it were structured to provide conservation revenues while keeping deer numbers low.

Sport hunting plays a role in contemporary wildlife conservation at LMNP and this has a direct effect on wildlife species preservation being hunted by a small, wealthy elite (Kisame, 2015). However, in contemporary conservation, there are many more interest groups with claims on wildlife and its habitats. Sport hunting, against viable alternative activities from a conservation perspective, sustains the use of natural resources to the extirpation of a population, either through overhunting or through conversion of habitat to alternative uses (Child and Darimont, 2015).

A study conducted in Kiruhura stated that the Wildlife

Management Authority receives 60% of its income from sport hunting license fees. In the Selous Game Reserve, where hunting is allowed on the periphery, 50% of hunting revenues are reinvested in conservation and anti-poaching (Estes, 2015). Like the United States, the state wildlife agencies are partially funded through the sale of hunting licenses and permits. Following the U.S. ban on elephant sport imports from Kiruhura and increased restrictions on lion imports under the Endangered Species Act, more than 6 million acres of hunting blocks were surrendered back to the government due to decreased booking by American hunters and sport hunting having lost its economic viability as a land use in these areas. The surrender of these areas was accompanied by the dissolution of a 100-man counter-poaching unit that had been employed by a hunting outfitter (Pasanisi, 2018). Nevertheless, these studies are not current and they could not be used to stop a current study from going on.

## METHODOLOGY

### Research design

A cross-sectional design was used for the survey. Given the stratified structure of respondents, the strategy was chosen since it allowed for simultaneous interaction with many groups. This method is essential for obtaining data from a population sample so that findings may be generalized to the entire community to mitigate the effects of social change.

### Study population

The study population consisted of the different stakeholders, including sports hunting companies, District Local Government Officials, LMNP Officials, and Local Community Members. They were sampled because of their knowledge and information about atheist life and their oversight of environmental conservation management and nature.

### Sampling

Based on the suggestions made by Amin (2005) and shown in (Table 1), a sample size of 286 respondents was chosen because just a tiny percentage of the target population was needed. The sample was calculated using Yamane's (1967) formula:  $1+N(e)^2$ , where  $n$  = sample size,  $N$  = total population targeted, and  $e$  = percentage of error in sample selection (5% or 0.05), and 1 represents any likely avoided element that would have been included.

$$n = \frac{N}{1+N(e)^2}n = \frac{N}{1+N(e)^2}$$

Formula;

Where  $n$  = sample size

$N$  = total population targeted

$e$  = percentage of error made in selecting sample (5% or 0.05)

1 = is representative of any likely avoided element that would have been included

$$n = \frac{1000}{1 + 1000(0.05)^2}$$

$$n = \frac{1000}{1 + 1000(0.0025)}$$

$$n = \frac{1000}{1 + 2.5}$$

$$n = \frac{1000}{3.5}$$

$n = 286$

Thus, the sample size of the study was 286 respondents. To obtain the sample size proportion for the study, the formula below was used:

$$n1 = \frac{N1}{N} Xn$$

$n1$  = sample size proportion

$N$  = population size

$n$  = sample size

$$n1 = 25/1000 x 286 = 7$$

$$n2 = 15/1000 x 286 = 4$$

$$n3 = 160/1000 x 286 = 46$$

$$n4 = 800/1000 x 286 = 229$$

The researcher employed a census sampling method to select the local community to participate in the study. Sport hunting companies, district local government officials, and Lake Mburo National Parks/UWA officials were selected using a purposive sampling method.

### Data collection methods and instruments

A structured self-administered questionnaire was used in this study. The target audience was given access to a self-administered structured questionnaire. The questionnaire was utilized to aid the researcher in gathering as much data as feasible in the least amount of

**Table 1:** Population and sample size.

Designation	Target Population	Sample size	Sampling Technique
Sport hunting company officials	25	07	Purposive sampling
District local government officials	15	04	Purposive sampling
Lake Mburo National Parks officials	160	46	Purposive sampling
Local community members	800	229	Census sampling
Total	1,000	286	

Source: (LMNP Sport Hunting Report 2020; Census Report 2014; Yamane, 1967)

time possible. Closed-ended questions were used in the questionnaire's creation.

### Data analysis

Content analysis was the main technique for data analysis. The data was classified, tallied, and totaled according to the objectives of the study. Data was tabulated and converted into frequencies and percentages to fit the objectives of the study.

### Ethical considerations

After approval of the research topic by the University Supervisor and the development of the research tools, the researcher had to obtain a research permit from the school of science (SCOS) of Nkumba University authorizing the conducting of the research. This letter was presented to the Deputy Director Human Resource of Uganda Wildlife Authority that introduced the researcher to the Chief Warden, Lake Mburo National Park. The researcher explained the need for data collection and the purpose of carrying out the research to ensure that all subjects participate voluntarily by obtaining their consent. Full explanation was made to remove any suspicion among the subjects.

Informed consent and privacy were the main ethical issues addressed in this study. Confidentiality was considered to protect the privacy of the respondents or participants. Respondents/participants were also assured that the study was solely for academic purposes, and that the self-administered questionnaires were purposefully anonymous.

As a result, participants/respondents were given the option of giving their informed consent. The participants chose to participate in the study voluntarily, and they have the option to withdraw at any time. The respondents' anonymity was preserved by not asking them to write their names on the questionnaires. There is no known risk of physical or psychological harm to participants in this study.

Furthermore, all researchers and scholars whose work was cited in this study were quoted, acknowledged, and

appropriately cited. The researcher ensured that findings are reported precisely to avoid fabrication of information through the presentation of fraudulent results.

At this level, the researcher acknowledged the importance of knowledge in the pursuit of truth. Individual identities were withheld to protect against traceability and flexibility, and a lot of effort was put into ensuring participants' or respondents' rights to privacy.

## RESULTS AND DISCUSSION

### Effect of Sport Hunting on wildlife conservation in the Rurambira and Nyakahita parishes of the Kiruhura District

The study investigated into the effect of sport hunting on wildlife conservation in the Rurambira and Nyakahita parishes of the Kiruhura District. To obtain results for this, a procedural approach was followed; relationship between sport hunting and wildlife conservation, and then the regression analysis that reveals the effect of sport hunting on wildlife conservation.

### Relationship between Sport Hunting and Wildlife conservation

The relationship was determined by using Pearson product moment correlation analysis. Significant results were measured at probability value (p-value) or 99% confidence interval. Most important, this was a collinearity analysis which indicates relationships among the different aspects of sport hunting and each of the two categories of wildlife conservation, i.e., the positive aspects and negative aspects of wildlife conservation as indicated in (Tables 2 and 3) and interpretation. The findings show an association between the decrease in poaching and advancements in animal conservation that is statistically marginally favorable ( $r = 0.271^{**}$ ;  $p = 0.000$ ). Because of the decline in poaching, fewer wild animals may be used to lure visitors to Uganda from both within and beyond the country. Inferentially, sport hunting has improved wildlife conservation in the Kiruhura District's Rurambira and Nyakahita parishes by 27.1%, which may be

**Table 2:** Interpretation of correlation.

Correlation coefficient	Correlation strength	Correlation type
-.7 to -1	Very strong	Negative
-.5 to -.7	Strong	Negative
-.3 to -.5	Moderate	Negative
0 to -.3	Weak	Negative
0	None	Zero
0 to .3	Weak	Positive
.3 to .5	Moderate	Positive
.5 to .7	Strong	Positive
.7 to 1	Very strong	Positive

**Table 3:** Collinearity coefficients for sport hunting and wildlife conservation.

	Wildlife conservation	
Controls poaching	Pearson Correlation	.271*
	Sig. (2-tailed)	.000
	N	286
Controls animal population	Pearson Correlation	.151*
	Sig. (2-tailed)	.010
	N	286
Funds conservation purposes	Pearson Correlation	.301**
	Sig. (2-tailed)	.000
	N	286
Helps protect the land	Pearson Correlation	.257*
	Sig. (2-tailed)	.000
	N	286
Creates conservation incentives	Pearson Correlation	.199*
	Sig. (2-tailed)	.001
	N	286
Benefit local people	Pearson Correlation	.156*
	Sig. (2-tailed)	.008
	N	286

\*\*Correlation is significant at the 0.01 level (2-tailed).; \*Correlation is significant at the 0.05 level (2-tailed).

attributed to the practice's goal of reducing poaching. The responses from the local communities, which demonstrate a lack of comprehension of the reason for sport hunting, are to blame for the low explanation percentage. Many of the respondents tended to view "sport hunting" negatively. The results are in contrary with UWA (2015) indicating that though not understood the reason behind the sport hunting activity in Uganda is to provide an incentive to landowners to manage and protect wildlife on their land by giving wildlife as a resource an opportunity to demonstrate its economic value to landowners.

In Kiruhura's Rurambira and Nyakahita parishes, there is a statistically significant positive correlation between the idea that sport hunting decreases the number of animals and wildlife conservation ( $r = 0.151^{**}$ ;  $p = 0.000$ ). This is true because when animal populations drop due to *sport hunting*, the resource base and animal base for tourism attractions are lost. On the other side, fewer animals because of sport hunting can help those whose

lives are frequently threatened by wild creatures. The results are contrary to Wanyama and Kisame (2015) who state that sport hunting is implemented in wildlife conservation areas to prevent the depletion of wildlife resources, the usage of species and to regularize ecosystems. Sport hunting helps to regularize wildlife conservation efforts by, among other things, establishing harvest limits and methods, protecting wildlife habitat, educating the public, enforcing wildlife laws, researching wildlife ecology, and mitigating human-wildlife conflict.

The belief that sport hunting is done to raise money for wildlife conservation has a moderately significant statistical relationship with wildlife conservation ( $r = 0.301^{**}$ ;  $p = 0.0001$ ). This indicates that the plan that makes sport hunting a source of income contributes to 30.1% of the improvements in wildlife conservation in Kiruhura's Rurambira and Nyakahita parishes in the Kiruhura District. This is specifically when the areas attract tourists and the local community sells crafts and other traditional equipment. On the other hand, the

**Table 4:** Model Summary for sport hunting and wildlife conservation.

<b>Model Summary</b>				
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.374 <sup>a</sup>	0.140	0.137	0.76691

a. Predictors: (Constant), Sport Hunting.

**Table 5:** Analysis of variance for the model.

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	27.237	1	27.237	46.309	.000 <sup>b</sup>
Residual	167.035	284	.588		
Total	194.272	285			

b. Predictors: (Constant), Sport Hunting

**Table 6:** Coefficients of the linear regression.

<b>Coefficients</b>					
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	2.467	.103		23.905	.000
Sport Hunting	.255	.037	.374	6.805	.000

Dependent Variable: wildlife conservation

findings slightly differ with Lindsey et al., (2016) showing that several countries on the African continent promote sport hunting to avoid animals developing bad habits. Sport hunting conserves wildlife species, habitats, and biodiversity. Sport hunting has an important role in African countries and it brings up a completely different set of issues. some of those countries.

Conducting sport hunting for the purposes of protecting land space does more harm than good. This is because the association between sport hunting to protect land and negative aspects of wildlife conservation ( $r = 0.356^{**}$ ;  $p = 0.001$ ) is a medium correlation. This means that when sport hunting is done and animals are reduced in number, tourist attractions are not interfered with, but rather the quality of animals is taken care of. Simply put, sport hunting largely leads to the enhancement of the quality of animals and enhances the living standards of community members. The notion that sport hunting creates conservation incentives has a medium statistically significant association ( $r = 0.365^{**}$ ;  $p = 0.000$ ) with wildlife conservation. Relatedly, the study established a weak positive statistically significant relationship ( $r = 0.156^{**}$ ;  $p = 0.008$ ) between sport hunting to benefit local people and the positive aspects of wildlife conservation. According to UWA (2015), sport hunting is conducted around the northern ranches of LMNP to ensure better management of wildlife populations so that those species with fewer animals can have higher prices. This can be achieved through consultations with local communities as the key actors.

### Regression analysis for sport hunting and wildlife conservation

According to the third objective, sport hunting has a significant effect on wildlife conservation in the Kiruhura's Rurambira and Nyakahita parishes. Using the average mean score for the components that explain wildlife conservation and the average mean score for sport hunting factors, a straightforward regression analysis was carried out to generate results for this assumption. The findings for this are presented in Tables 4, 5, and 6. With a correlation value of ( $r=0.14$ ) in (Table 4), the findings show a strong relationship between sport hunting and wildlife protection. Effective sport hunting statistically strongly predicts the success of wildlife conservation. The percentage variation in improvement will drop from 14% to 13.7% if the idea of sport hunting continues to flow under the existing circumstances, such as the local community not reflecting a favorable attitude, according to the modified R Square value of 0.137. Given that many of the responses fell into the "not sure" or "agree" category, the standard error of this margin, which is 0.76691, means that, on average, the estimates of wildlife conservation using this model may be off by 0.766. In an ANOVA, the F-ratio represents how well the regression model fits the data. Table 5 findings show that sport hunting statistically substantially predicts wildlife conservation, with an  $F = 46.309$ ;  $P = .000$ . (That is, the regression model fits the data well.) Regression was a good model to use for testing the hypothesis, which says

that wildlife conservation is not impacted by sport hunting activities (Table 5).

This suggests that sport hunting statistically strongly predicts wildlife conservation in a positive way, according to (Table 6) ( $B = -0.255$ ;  $p = .000$ ). Inference suggests that an improvement in some areas of sport hunting led to an increase in wildlife conservation of 25.5%. The degree of inaccuracy for the b-coefficient is explained by the t-value of 6.805. The t-value must be less than or equal to the range of 27–32 for positive findings to be statistically significant, beyond which the error may not be permitted. This encouraging finding supports the idea that sport hunting helps to conserve animals. In line with these findings, Southwick (2015) reviews that in several countries where there are no strong central governments; hunting can protect against civil unrest, poor food security, and avoid placing game populations in extreme jeopardy. Sport hunting saves the human population from exploiting game species and converts wildlife habitats into agricultural or other uses to meet their immediate needs of lack of food security.

## Conclusion

The findings show an association between the decrease in poaching and advancements in animal conservation that is statistically marginally favorable because of the decline in poaching, fewer wild animals may be used to lure visitors to Uganda. On the other side, fewer animals because of sport hunting can help those whose lives are frequently threatened by wild creatures. The belief that sport hunting is done to raise money for wildlife conservation has a moderately significant statistical relationship with wildlife conservation. This is because the plan that makes sport hunting a source of income contributes to improvements in wildlife conservation in Kiruhura's Rurambira and Nyakahita parishes. Simply put, sport hunting largely leads to the enhancement of the quality of animals and enhances the living standards of community members.

## Recommendations

- UWA to increase education and awareness raising to bridge the knowledge gap on sport hunting activities.
- UWA and KDLG to follow up all sport hunting funds released for sport hunting projects to reduce corruption tendencies and shoddy works by the association members.
- Sport hunting money should be shared according to land size owned by the landowners.
- Association to ensure that local communities' gardens/crops be fenced off to create harmony.

- Increase and improve on water sources for both livestock and wildlife in the area
- Add value to increase income from the sport hunted animals such as meat into sausages and skins turned into leather for shoes, bags, belts among others
- UWA, sport hunting company and Association should set aside money to compensate local communities for the losses caused by wildlife.
- UWA, KDLG and NEMA to strengthen law enforcement operations to reduce the ecosystem and habitat loss such wetlands.

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