

## The Impact of the Use of Firearms in Wildlife Poaching In Game Parks

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**Abstract:** The study sought to find out the impact of the use of firearms in wildlife poaching. Use of firearms in poaching is a threat to the stability and peace in any given country. It threatens the socio-economic environment. There has been a proliferation of use of firearms by poachers and it is in the context of this major concern that this study had to be conducted. The study adopted a qualitative research paradigm and descriptive research design was the preferred research design. The population of this study was the Hwange National Parks staff members. Game rangers and the main camp manager were selected as respondents. An interview was conducted with the main camp manager while game rangers were selected for focus group discussions. The major findings were that that use of firearms in poaching at Hwange National Park is fairly a new phenomenon but it has come with so much intensity such that statistics are rising at an alarming rate. Besides loss of lives among game rangers and poachers there is always the danger of the extinction of animal species like the rhino. The study therefore recommended that there is need for more refresher trainings for staff to enhance anti-poaching skills. More sophisticated and advanced equipment is required for rangers to keep ahead of poachers. A small aircraft for aerial surveillance would almost end use of firearms in wildlife poaching within national parks.

**Keywords:** poachers, game, rangers, firearm, wildlife, national park.

### INTRODUCTION

Poaching in Zimbabwe has been viewed as an emerging threat mostly in the country's national parks and consequently on the economy. The rise for the need of ivory in places like Asia has seen poaching cases being on the rise in the past decade. Poaching is a threat to the stability and peace in any given country. Poaching threatens the socio-economic environment. This is seen in the proliferation of small arms in Africa and Zimbabwe is not an exception. There have been a rise in cases of foreigners using undesignated entry points and guns like Ak47 rifles being to kill elephants for the ivory and rhinos for the horn which is said to have medicinal benefits. Lives have been lost in the clashes between poachers and rangers. Civilians living near these illegal entry points have also fallen victim to these poachers who at times move in groups which are heavily armed and easily overpower civilians.

The use of small arms for poaching by poachers have also led to other criminal activities like armed robberies and cattle rustling which is prevalent in the outlying areas near the Zambezi river. Insurgent groups can also be sponsored using money from poaching and this also leads to money laundering and

weapons trafficking. Poaching also presents significant security challenges for the military and police forces in Africa. Poachers often use sophisticated weapons yet the game parks rangers, police and military in most African nations are poorly equipped thus cannot effectively combat the scourge of poaching. Corruption and lack of sufficient equipment and finance is hampering the government's ability to reduce poaching.

According to the World Wildlife Fund [1], poachers have begun using increasingly sophisticated weapons and equipment including rocket launchers, M-16 rifles and night vision goggles. This has led to game rangers and armed forces using more aggressive tactics to combat poachers thereby increasing the risk of casualties to themselves, poachers and surrounding communities. Wildlife Research Conservation Unit [2], postulates that poaching which started as an environmental and conservation problem has turned to a full blown national security issue as Africa loses more than 30 000 elephants every year and there is a risk of elephant and rhino extinction in Africa.

According to WildCRU [2], Hwange National Park is the largest game park in Zimbabwe occupying

roughly 14 650 square kilometres. It is located in the northwest corner of the country about one hour south of the mighty Victoria Falls. The game park was founded in 1928 with the first warden being Ted Davison. The game park is close to the Kalahari desert, a region with little water and very sparse vegetation. The north and north-west of the park are dominated by the mopane woodland. It became the royal hunting grounds to the Ndebele warrior king Mzilikazi in the early 19<sup>th</sup> century and was set aside as a National Park in 1929. Hwange national park boasts of a tremendous selection of wildlife with over 100 species of mammals and nearly 400 bird species recorded. The elephants of Hwange are world famous and the game parks elephant population is one of the largest in the world. Although it has been argued that elephant populations cause change in vegetation structure some recent studies suggest that this is not the case, even with the large increases in elephant population recorded in the late 1980's. The game park has three distinctive camps and administrative offices at Robins, Sinamatella and the largest one at Main Camp [3].

According to Hwange National Park, Natural resource background report [3], the population of cape wild dogs to be found in Hwange is said to be one of the largest surviving groups in Africa today. Other major predators include south west African lion whose distribution and hunting in Hwange National park is related to the pans and waterholes, African leopard, spotted hyena and south African cheetah. So with this range of animal species Hwange national parks always a tempting area for poachers to do their illegal activities.

### **Statement of the problem**

National wildlife parks in Zimbabwe have been battling with combating poaching which not only poses a threat to the wildlife, tourism, economy but also to the game rangers and communities adjacent to wildlife parks. Lives have been lost during ranger and poacher shoot-outs. Hwange National Park has not been spared. Armed poachers pose a serious threat to the game rangers. This is further perpetuated by the sophisticated weaponry which has found its way to the hands of poachers. Money laundering, arms trafficking, organised crime syndicates and high demand of ivory and rhino horn in the market has also exacerbated the situation. Joint operations between the Military, central Intelligence Organisation, Police and National Parks have been made to come up with strategies on how best to combat the problem, however the problem still persists. More aggressive methods have been used to thwart the problem, however the risk of casualties have also increased. Poaching syndicates are said to be linked to locals, Parks officials and even government officials. This has fuelled the problem making it difficult for stakeholders to come up a lasting solution. It is in the context of this major concern that this study sought to

find out the impact of the use of firearms in wildlife poaching.

### **Significance of the study**

Poaching in Zimbabwe has become rampant and poses a serious threat to the ecological stability of the country, security and development. Wildlife poaching and trafficking has become one of the most lucrative illicit activity after drug trafficking, human trafficking and money laundering. The result of this study may be used by the National Parks and relevant stakeholders to come up with strategies to effectively deal with the use of firearms in wildlife poaching. It is going to reflect problems and initiatives being taken on the ground to combat poaching. This study will also be used as reference by other researchers.

### **Purpose of the study**

The study seeks to achieve the following objectives:-

- To determine the causes of wildlife poaching
- To establish the impact of use of firearms in wildlife poaching on the game rangers of Hwange National Park.
- To identify other threats that might emanate because of use of firearms in wildlife poaching.
- To derive the way forward and recommendations in dealing with use of firearms in wildlife poaching.

### **Research Questions**

- What are the causes of wildlife poaching?
- What is the impact of use of firearms in wildlife poaching on the game rangers at Hwange National Parks?
- What other threats might emanate from the use of use of firearms in wildlife poaching?
- What has been the response from the relevant authorities to the problem of firearms in poaching?

### **Assumptions**

It is assumed that use of firearms in wildlife poaching is a threat to rangers and communities in Hwange. Poverty contributes to wildlife poaching. Corruption by relevant authorities also contribute to wildlife poaching. Weak legislation and porous borders exacerbate wildlife poaching. Another assumption is that the facts that will be given by participants would be true and that the correct population would be sampled.

### **Limitations of the study**

The in-depth analysis of the study cannot be attained since the study will be confined only to Hwange National Parks. Due to security issues, poachers were not considered as respondents in this study. Funding constraints also limited the researchers to the chosen area of study which is not the only area affected by wildlife poaching.

### **Delimitations of the study**

The study is confined only to Hwange National Park, Hwange district and might not be generalised to other wildlife game parks. The study is only confined to the impact of the use of firearms in wildlife poaching: a case of Hwange National Parks.

### **Ethical considerations**

The researchers observed research ethics and standards at all times and ensured true, reliable, and valid results. This research took into consideration that the area of study, use of firearms in wildlife poaching and its impact on rangers is emotional and measures would be put in place to ensure that confidentiality and privacy are guaranteed. The study also guaranteed voluntary participation.

### **LITERATURE REVIEW**

Wildlife poaching is complex and may involve different actors. These range from armed syndicates, game park officials, international trans-border groups and community members. Griffiths [4], states that weak legislation has been a key factor for escalating poaching in the African countries, many poaching suspects are often given light sentences that are not deterrent enough.

Small Arms survey [5], highlighted that in Central Africa Republic (CAR), actors involved in poaching include armed militias like the Lords Resistance Army (LRA), rogue members of the armed forces, bandits and criminal gangs, commercial poachers and bushmeat and subsistence farmers. The survey also points out that in Tanzania and DRC poaching is partly thriving due to weak legislation and corruption. In Uganda weak legislation has been a central cause of an escalating use of the country as a transit point by commercial traffickers. Law enforcement is also hampered by inadequate funding for frequent patrols and purchase of state of the art equipment. The small arms survey [5], further states that the free flow of guns in Africa facilitates poaching and poaching in turn facilitates the arms trade.

Duffy [6] states that most elephant poachers in Tanzania are from Mozambique and are very experienced. Some of the poachers are said to be from the local communities who work for syndicates in Dar es Salaam. The foundation further states that weapons enter Tanzania from the DRC and Somalia. The poaching syndicates are linked to terrorists groups such as Janjaweed, Al-shabaab, Boko Haram and LRA.

Bolton [7], points out that local people are often hired by ivory traffickers to find, kill and de-tusk elephants. Ivory is then smuggled through different methods of transport across country borders. Bolton [7] further points out that customs and border agents lack the capacity to detect and seize trafficked ivory.

Trafficked ivory is often well hidden or else disguised as another product in order to avoid detection by authorities.

Griffiths [4], states that demand for the rhino horn and ivory outpaces supply and is so lucrative such that syndicates including terrorist groups and corrupt military officials are becoming involved in countries across east, central and southern Africa. Poaching activities are increasingly becoming sophisticated targeting and killing animals with weapons such as semi-automatic guns and robot propelled grenades, which are not only a danger to the wildlife but also civilians.

Small Arms survey [5], Highlights that armed groups more ivory and rhino horn in exchange for arms. These groups use existing smuggling operations to facilitate the movement of ivory throughout Central Africa. Rebels may also offer ivory and rhino horn to the local officials in exchange for the guarantee of safe refugee in the region.

Cites Secretariat [8], points out that demand from illegal ivory is a strong predictor of poaching trends. Poor governance enables both poaching and ivory trafficking through ineffective law enforcement or active aiding and abetting by unscrupulous officials.

Anderson and Jooste [9], state that a booming black market trade worth hundreds of millions of dollars is fueling corruption in Africa's ports, customs offices and security forces as well as providing new revenues for insurgent groups and criminal networks across the continent. Anderson and Jooste [9], further state that soaring global prices for ivory and rhino horn are driving the poaching frenzy. The profits from wildlife trafficking have also fuelled corruption, weakening and co-opting critical state institutions such as the police and military. In South Africa evidence has linked former members of the elite police and military units to rhino horn trafficking.

Cheteni [10], states that since 2006 poaching has shifted from eastern Africa to southern Africa. According to the Species Survival Commission (SSC) report 96% of detected rhino deaths in Africa occurred in Zimbabwe and South Africa. The soaring prices of the rhino horn in the past decade has led to more poaching of the protected species.

Duffy [11], cites that in the early 1990's in Zimbabwe white rhinos were dehorned in Hwange National Park. De-horning and trans-location of rhinos from vulnerable areas reduced poaching of black rhinos. Duffy [11], further cites that in the 1980's the Zimbabwe government authorised the shoot to kill policy as a strategy of reducing poaching and it was met with criticism. In that period between 1984 to 1993 park

rangers killed more than 170 poachers, then a protection of wildlife act was passed in 1989, this Act was meant to protect game wardens that feared being charged with murder. The Act was said to be violating human rights as suspected poachers were not given a right to appeal and denied basic processes.

### **RESEARCH METHODOLOGY**

Ritchie and Lewis [12] defines research methodology as the general approach to studying a research topic. This study adopted a qualitative research approach. Corbin and Strauss [13] asserts that qualitative research is an interpretative, naturalistic approach to the world and it seeks to study things in their natural settings in the course attempting to make sense, or interpret, phenomena in the terms of meaning people bring to them.

Qualitative approach enables the researcher to study selected issues, cases or events in detail. Corbin and Strauss [13] asserts that qualitative method is humanistic mainly because its primary desire is to step beyond the known and enter into the world of the participants and to see the world from the perspectives of the participants in so doing making discoveries that will contribute to the development of empirical knowledge.

#### **Research Design**

The descriptive research design was used in this study. Descriptive research design does not form a hypothesis or develop a theory, it is objective and neutral. Yin [14] states that descriptive research design seeks to provide an accurate explanation of observations of phenomena. According to Lewis and Ritchie [12] the major strength of this research approach is that it is applicable to a variety of behaviours in different contexts and diverse areas and is easy to understand. Descriptive research design also strives to collect, integrate and present data from a variety of sources of evidence as part of any given study.

#### **Population of study**

According to Corbin and Strauss [13] population is a specified aggregation of the study elements and it is from this that the sample is actually selected. The population of this study was the Hwange National Parks staff members.

#### **Sample size**

A sample is a small portion of the population which is of interest in the study from which data is to be gathered. In this study six respondents were selected. Main Camp Manager for an interview and five rangers for focus group discussions. Thus, because of the nature of research instruments used in this study, it was envisaged that a small sample would be manageable and still solicit enough information from the respondents.

#### **Sampling Procedure**

The sampling methods used were the purposive sampling to get the Main Camp manager and convenience sampling to get park rangers. Norman and Blaike [15] state that purposive sampling is an interviewee selection tool, and is also the deliberate choice of an interviewee due to the qualities the interviewee possesses. The researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience.

Convenience sampling is the process of selecting subjects or units for examination and analysis that is based on accessibility, ease, speed and low costs. According to Corbin and Strauss [13] convenience sampling involves the sample being drawn from that part of the population which is close at hand. A population is selected because it is readily available and convenient. With the nature of job for parks rangers, who spend most of their time in the field, this became the most appropriate sampling technique.

#### **Instruments of data collection**

The study used an interview guide and focus group discussions. The interview guide was used to solicit information from the Main Camp Manager and the focus group discussions were done with the game rangers.

#### **Interview Guide**

According to Blaike and Norman [15], an interview is a conversation where questions are asked to elicit information. They can be defined as a qualitative research technique which involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation.

#### **Advantages**

Opednaker [16] states that an interview can help to collect the fresh, new and primary information as needed. Any misunderstanding and mistake can be rectified easily in an interview because the interviewer and interviewee physically present before the interview board. Relations between the interviewer and interviewee can be developed through an interview. It increases mutual understanding and cooperation between parties. Sufficient information can be collected through the interview process because the interviewer can ask any question to the interviewee. Any interviewer increases the knowledge of both the interviewer and the interviewee, they can interchange their views and ideas.

#### **Disadvantages**

According to Opednaker [16], suitable candidates cannot be selected by interview only, the written test is more important than the interview. In the

case of the interview some confusion may arise in the future as, there is no evidence actually that have been discussed at the interview. Much attention is required for a good interview but sometimes it is observed that both the interviewer and interviewee are less attentive, that is why real information cannot be collected. There is always a possibility that the interview process can be influenced by the biases of the interview. Generally an interview method is expensive.

### **Focus Group Discussions (FGD)**

Focus Group Discussions is a qualitative research technique consisting of a structured discussion and used to obtain in-depth information from a group of people about a particular topic. The purpose of the discussion is to use the social dynamics of the group with the help of a moderator or facilitator to stimulate participants to reveal essential information about people's opinions, beliefs, perception and attitudes. Focus groups are often conducted among homogenous target populations who usually share a common characteristic such as age, sex or socio-economic status which encourages a group to speak more freely about the subject without fear being judged by others.

### **Advantages of Focus Group Discussions**

It is an inexpensive and fast method of acquiring valuable data. Co-workers and friends are more comfortable in voicing views in each other's company than on their own with the researcher. Participants are given a chance to reflect or react to the viewpoint of others with which they may disagree or of which they are unaware.

### **Disadvantages of Focus Group Discussions**

The researchers have trouble controlling the discussion and managing the process in comparison to individual interview. A few individuals could possibly be introverts while others take control of the debate and impact the end result or possibly even introduce bias. The group climate can hinder or fail to energise the individual or it can be livelier and produce more data.

### **Procedures for data analysis and presentation**

Blackie and Norman [15] state that gathered data in research will have little meaning unless it is analysed and given assessment. The data obtained was primarily aimed at addressing the research objectives and questions. Analysing of the data obtained was done in order to answer the research questions.

Descriptive narratives were used to interpret and analyse data. The qualitative data which was obtained through the interview guide and focus group discussions was analysed. Data interpretation enabled the researcher to finally make recommendations at the end of the study.

## **RESEARCH FINDINGS**

### **Responses from the interview with the Main Camp manager**

The Main Camp manager was asked to briefly explain the intensity of poaching using firearms in Hwange national Parks. His response was that poaching using firearms in Hwange National Park is a new phenomenon but it has come with so much intensity such that statistics are rising at an alarming rate. Although poachers are continue to other methods like cyanide poisoning of wildlife, use of firearms s one of the major threats. Poachers, mostly from neighbouring countries, use AK47 rifles to gun down elephants and rhinos. As of the year 2017 seven elephants were shot by poachers. To make matters worse sophisticated methods like guns equipped with silencers are being used in some cases. The locals in adjacent communities have at times been implicated in harbouring poachers.

The main Camp manager was asked about the impact of gun usage for the Parks rangers of Hwange National Parks. To this he said, the Parks rangers are always in danger of losing their lives especially when there is a confrontation with poachers a shootout always ensues. Although they are trained on anti-poaching skills it is always a danger for them to be exposed to such dangerous situations. There are instances where rangers have lost their lives and also instances where poachers have been gunned down. It is a case of who reacts first between poachers and Parks rangers. Sometimes it is unfortunate that people are killed, which is not the primary motive of National parks. The best would be to apprehend these poachers and they face the wrath of the law for the crimes they commit.

On the causes of wildlife poaching, the main Camp manager alluded that poaching is so rampant in the national parks because there is a ready market especially for the ivory and rhino horn. A lot of money is involved in these transactions and that almost instantly changes the lives of these poachers for the better. Poverty drives people into poaching. In times of drought there is always an increase in cases of poaching. Some are motivated when they see their friends who are into poaching excelling in life.

When asked about the threats that comes with use of firearms in poaching the main camp manager indicated that besides loss of lives among game rangers and poachers there is always the danger of the extinction of animal species like the rhino. He said the rhino survival is already in danger, so the rise in the use of firearms only exacerbates the case. It also affects the tourism industry. The very animal species targeted by the poachers are the ones that boost the tourism industry. So the more they are lost through these criminal activities the more business is lost.

The main camp manager was asked about measures that have been put in place to combat poaching. Some of the issues he raised are increasing the number of game rangers patrolling in the parks, introduction of sniffer dogs to aid rangers, rewarding community members who act as whistle blowers on suspected poachers, arresting people who are found with unlicensed firearms, giving deterrent sentences to poachers who are caught and arrested.

#### Responses from the focus group discussions

The game rangers were asked about how often they have to contend with poachers who are armed. The general consensus among the game rangers was that the conflict with armed poachers is on the rise and hardly two months pass by without a report on suspected armed poachers or an assignment to track armed poachers in and around the parks.

The game rangers were asked about the impact this has on their daily duties. They all concurred that it is no longer business as usual in the national parks. Their lives are now in danger more than ever before, not from the dangerous animals and the trouble of having to patrol at night but from potential shootouts against armed poachers. Sometimes these poachers would be armed with sophisticated weaponry which would be no match for the game ranger weaponry.

On strategies in place to combat to address this problem efforts have been made to form joint operations with other sister organisations like the Police and military. Whenever there is the involvement of police or military reported poaching activities usually subside. Game rangers were asked whether lives of rangers have been lost due to wildlife poaching. They all agreed that there have been a good number of reported cases of fatal injuries and few cases where game have been killed. This they attributed to the training they go through such that in most cases the casualties are on the poachers' side. Furthermore they said they live and work in the national parks and are more familiar with surroundings than poachers. This works against the poachers since most of the clashes happen at night.

#### Recommendations to mitigate this problem

On what could be done to make their duties safer:

- Provide incentives for members of the local community who act as whistle blowers or are actively involved in the fight against poaching.
- Involve the co-operate sector in the fight against armed poachers
- There is need for the game rangers to be provided with sophisticated or more advanced guns compared to what they are currently using.
- Provision of night vision equipment like torches, and binoculars for the day to enhance vision game rangers.

- There is need for more refresher trainings for staff to enhance anti-poaching skills.
- A small aircraft for aerial surveillance would almost end poaching within national parks.
- There is need to employ more rangers to boost numbers and provide more coverage of the Parks area

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