‘Elephants must also fund their own upkeep…’

A WPR-analysis of the tensions between the government and conservation NGOs on the management and mitigation of the elephant crisis in Zimbabwe

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Abstract

Purpose: The purpose of the thesis is to analyse the tensions between the government and conservation NGOs regarding the mitigation of the elephant crisis in Zimbabwe. The thesis aims to examine their contrasting representations of the problem and the discourses/knowledges that inspire their arguments. This is done in order to canvass what subjects, effects, and socio-economic implication the representations of the problem produce.

Method: Analysis of empirical material will be done using Carol Bacchi's "What's the problem Represented to be?" approach. The method has the foundation on the notion that problems are not self-evident, but that policies create specific representations of the problem.

Result: The analysis demonstrates that the tensions over the management and mitigation of the elephant crisis in Zimbabwe are not over a self-evident elephant problem. It rather demonstrates that the tensions emanate from contrasting representations of the problem by the government and conservation NGOs. Such contrasts result from contrasting discourses and knowledges that these antagonists base their arguments on. This, in turn leads to tensions regarding the proposed solutions to the crisis.

Keywords: elephant, Zimbabwe, government, NGO, problem, solution, conservation

Contents

Abbreviations

BBC	British Broadcasting Corporation
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CBNRM	Community Based Natural Resource Management
CITES	Convention on International Trade in Endangered Species of Fauna and Flora
COVID 19	Coronavirus Disease 2019
CNRG	Centre for Natural Resource Governance
HEC	Human Elephant Conflict
IUCN	International Union for Conservation of Nature
HWC	Human Wildlife Conflict
NGO	Non-Governmental Organisation
SDG	Sustainable Development Goal
UNEP	United Nations Environment Programme
US$	United States Dollar
WWF	World Wildlife Fund
WPR	What's the problem represented to be?
ZNEMP	Zimbabwe National Elephant Management Plan

1. Introduction

Wildlife management is a complex and often controversial field, as it involves balancing the needs and interests of wildlife populations, ecosystems, and human stakeholders. Consequently, governments acting on behalf of the people are the only bodies which can assume certain responsibilities when wildlife conflicts with human interests (Dorrance, 1983). Tensions in wildlife management often arise due to various factors and conflicting interests among different stakeholders. The sources of tension include conservation vs. economic interests, human-wildlife conflict, endangered species management, hunting and wildlife use only to mention a few.

Zimbabwe is facing a crisis due to the number of elephants and how they should be regulated. The nation is reported to have the second largest population of elephants on the planet and official statistics claim that there is a population of over 85,000 elephants against a carrying capacity for only 43,000 in available national parks (ZimParks, 2021). The government claims that this represents an overpopulation of elephants in the country and has resulted in several problems with the environment and human habitats. There are claims that the surge in the number of elephants has led to an increase in the human-wildlife conflict, destruction of habitats, environmental degradation, and lack of proper care for the animals; hence there is urgent need to deal with this crisis (Matsengarwodzi, 2021). The way the government has represented the elephant crisis in the country and its proposed ways of mitigating the crisis have stirred strong opposition from conservation NGOs. These NGOs have represented the crisis in a different way using knowledge and discourses that are contrary to the government's in their shaping of the problem. Such a move has led to tensions between government and conservation NGOs on how the crisis should be mitigated.

In its bid to curb this growing conundrum, the Zimbabwean government formulated the Zimbabwe National Elephant Management Plan, with the first phase spanning between 2015 – 2020, followed by an updated version of 2021 – 2025 (Matsengarwodzi, 2021). The main point drawn from this document is that the government seeks to maintain numbers/densities of elephant at levels that do not adversely impact on biodiversity conservation goals while contributing to

economically viable and sustainable wildlife-based land uses in Zimbabwe (ZimParks, 2021). This goal does not seem to arouse any critics, but rather how it ought to be achieved is the main bone of contention. In this research I shift focus to the problem-solution complexes, exploring how the elephant crisis is represented in the government's proposed solutions. I explore this in order to highlight that the elephant crisis in Zimbabwe is a political construct rather than a self-evident problem.

Put together this calls for critical research on how wildlife management problems are represented in order to understand why certain solutions are deemed more appropriate than others. It also offers insights into which knowledge and/or discourses form the argument basis of the problem-solution representations. This study examines the Zimbabwean government's plans to dispose some elephants strategically to protect national parks, local economies, and biodiversity in general (as outlined in the Zimbabwe Elephant Management Plan 2021–2025), as well as the counterarguments made by wildlife conservation NGOs in opposition to these plans. Previous research has mainly focused on tensions in wildlife management as tensions over self-existent wildlife problem, and debates over which solutions are the most viable ones. In this thesis, I take a different approach as I aim to highlight that tensions in wildlife management are rather tensions due to contrasting representations of the problems. Through a 'what's the problem represented to be' (W.P.R.) analysis of the tensions in elephant management in Zimbabwe, I explore how this crisis is differently represented and how the contrasting problem representations by the government and conservation NGOs result in tensions in elephant management and crisis mitigation. This is critical in understanding why certain solutions are deemed more appropriate than others and gaining insights into which knowledge and/or discourses form the argument basis of the problem-solution complexes. Such a study is vital because it can make visible the political nature of the problem and thereby inform better decision making, but it cannot identify what solution is good or bad. It also reveals the fact that no solutions are apolitical - all proposed solutions are built on political representations of the problem. This is important to investigate to understand the political nature of wildlife management.

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2. Aim and Research Question

The analysis of this research aims to scrutinize how the problems pertaining to elephant numbers in Zimbabwe are represented to justify the management of elephants in certain ways. In more detail, this research aims to analyse the various discourses and knowledges which are the foundations of the elephant problem representations by the government; and how they clash with those of conservation NGOs resulting in tensions in the management and mitigation plans. The thesis will be answering the following main research question:

- How is the elephant crisis being represented to justify their management in certain ways?

And as sub questions:

- On what justifications do the stakeholders build their arguments for or against the management of wildlife in certain ways?
- How can the problem representations, phrased by the stakeholders, be understood in terms of their impact?

Through the following background and literature review, I describe the status of the elephant crisis in Zimbabwe, including some of the mitigation measures proposed and once implemented. The review also describes the ivory trade ban, the human-wildlife conflict and how they feed into this crisis. Lastly, the review will sum up with a description of some of the controversial issues in elephant management in order to offer insights on the various discourses and tensions which underlie wildlife management.

3. Background and review of literature

The global elephant crisis refers to the critical decline in elephant populations across the world due to a range of factors, including poaching, habitat loss, and human-elephant conflict. Elephants are being killed at an alarming rate for their ivory tusks, which are highly prized in many parts of the world. As a result, elephant populations have been declining rapidly, and some estimates suggest that they could go extinct in the wild in the next few decades if current trends continue (UNEP, 2013). In addition to poaching, elephants are also threatened by habitat loss and fragmentation, which is caused by human activities such as logging, agriculture, and urbanization. This leads to a loss of habitat, which makes it difficult for elephants to find food and water and increases the likelihood of human-elephant conflicts (UNEP, 2013). All these factors have led to elephants to be categorized as an endangered species which should be protected from extinction.

3.1 The human-elephant conflict

The below study of the literature seeks to give readers an overview of the main problems with human-wildlife conflict and the various methods proposed to reduce it. Such an overview is essential in understanding the analysis of this research pertaining to how the elephant crisis is represented in terms of the human-elephant conflict in Zimbabwe, and proposed solutions to it. It also helps to draw connections of ideas from the Zimbabwean government to dominant narratives and discourses in the literature.

Human-wildlife conflict refers to the negative interaction between humans and wild animals, often resulting in harm or damage to either party. This conflict has led to the extinction and reduction of numerous species and uncountable human deaths and economic losses (Nyhus, 2016). As human populations continue to grow and encroach on natural areas, and as some wildlife populations grow and encroach on human habitats, increasing human-wildlife interactions are becoming a significant problem (Peterson et al., 2010). Damage caused by wildlife is frequently cited as the primary cause of conflict, and numerous strategies have been implemented for minimizing such damage (Dickman, 2010). Nevertheless, considerable conflict frequently persists even after damage has been minimized, indicating that conflict

calls for unique, all-encompassing strategies for long-term settlement (Dickman, 2010). Other scholars place the blame on human activities like agriculture and mining which have led to significant habitat loss as a major cause of the conflict (Peterson et al., 2010). This loss of habitat forces animals to seek food and shelter in human settlements, which can result in conflicts with humans. Additionally, some human activities, such as hunting and poaching, reduce wildlife populations, making animals more likely to enter human settlements in search of food. These arguments indicate that the conflict is a result of both animals and humans; offering insights to this research analysis on the proposed solutions to the human-elephant conflict, whether the solutions address factors from both the wildlife and human perspectives.

Another school of thought argues that the HWC escalates because of ineffective authorities that manage it. For instance, Masse (2016) argues that the human-wildlife conflict results more centrally from changing relations between wildlife and people and the power and authority to manage conflict between them. HWC and its negative impacts are thus not natural phenomena but are the result of political decisions to create a particular type of conservation landscape (Masse, 2016). Thus, it has sometimes been argued that the human-elephant crisis in Zimbabwe has been politized to create a policy which justifies the management of elephants in a certain way.

Lastly, several methods have been used to reduce conflict between humans and wildlife. They include putting up physical barriers like fences and trenches to keep wildlife away from populated areas as well as using non-lethal techniques including scare tactics, repellents, and moving problem animals (Matsengarwodzi, 2022). As a last resort, killing or hunting nuisance animals has occasionally been done (Matsengarwodzi, 2022). Reduced human-wildlife conflict has also been demonstrated to be a benefit of community-based conservation projects. To effectively implement these programs, it is necessary to work closely with local people, both to teach them about wildlife and the value of conservation and involve them in the management of natural resources (Garavan, 2007; Tovey 2009 cited in Moran & Lau, 2014). Local communities are more likely to support conservation initiatives and act as stewards of the environment if this is done (Songorwa et.al, 2000). In this research, understanding the proposed solutions and the extent to which communities are engaged, helps in the analysis of how the elephant crisis is represented because of the human-wildlife conflict.

3.2 CITES ban on elephant and ivory trade.

The ivory trade has been a contentious issue in the global conservation community for several decades. An overview of this contentious issue is critical for this research as it provides insights on the effects of the ivory trade ban on elephant conservation in Africa and Zimbabwe specifically. It also helps in the analysis of different discourses (utilitarian or preservationist) different stakeholders subscribe to in a bid to justify their proposed solutions to the elephant crisis. The ivory trade ban is a policy measure aimed at preventing the sale and trade of ivory products, including elephant tusks, to reduce poaching and save the endangered elephant populations (Lemieux and Clarke, 2009). The purpose of this literature review is to understand how the ivory trade ban has influenced the political construction of the elephant crisis in Zimbabwe.

The ivory trade has a long history, dating back to ancient times when ivory was used to create intricate carvings and artifacts (Forbes, 2013). During the colonial era, the ivory trade was a significant source of revenue for European powers, and it continued to thrive throughout the 20th century. However, the trade had devastating effects on elephant populations, causing a sharp decline in their numbers, with some species pushed to the brink of extinction (Forbes, 2013).

In 1989, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) introduced a global ban on the trade of ivory (Lemieux and Clarke, 2009). The ban was implemented in response to the severe decline in elephant populations, caused primarily by poaching (Lemieux and Clarke, 2009). The ivory trade ban prohibits the import, export, and sale of ivory, except under very limited circumstances, such as for scientific research, antique items, and cultural purposes. The ban also established a system for regulating legal ivory trade and imposing sanctions against countries that violate the ban. Because of this ban, coupled by good conservation efforts, countries like Zimbabwe, Namibia and South Africa have ended up vast numbers of elephants that have exceeded the carrying capacity of their national parks (Forbes, 2013).

Since the middle of the 1980s, many southern African nations have opposed the ban on the trade in African elephants. They contend that because their governments follow excellent wildlife management policies and procedures, their national elephant populations have grown beyond what is sustainable (Stiles, 2004). The ivory trade ban has had several positive impacts on elephant populations and conservation efforts. The controversy over the CITES ban on the trade in elephant ivory is primarily contested by two opposing viewpoints: utilitarian and preservationist (Ginsberg, 2002). Preservationists favour a complete prohibition on the trade in elephant ivory and disapprove of any form of it. The utilitarian school

of thought advocates for sustainable, limited ivory trade and contends that the ban really does more harm than good. This philosophical divide over the use of trade as a conservation tool is, in many ways, irreconcilable (Ginsberg, 2002). One of the most significant impacts is a decrease in elephant poaching. Studies have shown that ivory prices have declined significantly since the ban was introduced, reducing the incentive for poachers to kill elephants for their tusks (Harvey, 2016). Additionally, the ban has helped to raise public awareness of the ivory trade and its impacts, leading to increased support for conservation efforts and policies (Harvey, 2016).

Despite the positive impacts of the ivory trade ban, there are also negative impacts that need to be considered. One of the main concerns is the impact of the ban on local communities that rely on the ivory trade for their livelihoods. In some regions, the ivory trade has been a significant source of income and employment, and the ban has resulted in job losses and economic hardship for these communities (Stiles, 2004). Another negative impact of the ivory trade ban is the potential for increased illegal trade and poaching. The ban has made it more difficult for countries to regulate and control the ivory trade, leading to an increase in illegal activity (Forbes, 2013). Some experts argue that the ban has created a black market for ivory, which is more difficult to regulate and control than legal trade.

The above-mentioned insights will be vital in the analysis of this research as they will aid in understanding the standpoints of different stakeholders regarding the elephant crisis in Zimbabwe. They will help in the analysis of the proposed solutions to the problem representations by the elephant crisis.

3.3 Other controversial issues in wildlife management

The management of wildlife has been a topic of interest and debate amongst scholars, conservationists, and other stakeholders around the globe. Conflicts over management of abundant wildlife populations have increased dramatically over the years (Chase et. al., 2002). Consequently, governments acting on behalf of the people are the only bodies which can assume certain responsibilities when wildlife conflicts with human interests (Dorrance, 1983). As a result, governments formulate policies to manage wildlife in certain ways.

3.3.1 Wildlife trophy hunting

Firstly, wildlife trophy hunting refers to the practice of hunting and killing animals, typically large and charismatic species, for the purpose of obtaining a trophy in the form of body parts, such as the head, horns, or skin. This practice has been a subject of significant debate and controversy in recent years. Proponents of trophy hunting argue that it can contribute to conservation efforts and local communities in several ways (Matsengarwodzi, 2021). For instance, that trophy hunting can generate substantial revenue through hunting permits and fees, which can be used to fund conservation programs, anti-poaching efforts, habitat restoration, and community development projects in rural areas (Matsengarwodzi, 2021). By assigning economic value to wildlife, it is argued that trophy hunting can provide an economic incentive for local communities and landowners to protect and conserve habitats, as they have a direct stake in maintaining healthy wildlife populations (Matsengarwodzi, 2022). Another argument is that trophy hunting can be part of a larger wildlife management strategy, helping to control populations in areas where natural predators are scarce or absent. This can prevent overpopulation, mitigate conflicts between humans and wildlife, and maintain the overall ecological balance (Semcer, 2019). Lastly, some believe that trophy hunting can provide employment opportunities, income, and other benefits to local communities. Revenue generated from hunting can be used for education, healthcare, infrastructure development, and other community needs, leading to improved livelihoods and reduced poaching (Semcer, 2019).

However, critics of trophy hunting raise several concerns and ethical arguments against the practice. They argue that trophy hunting involves killing animals primarily for personal gratification or to display trophies, which many people consider unethical and morally wrong (Susan-Nicol, 2023). It raises questions about the inherent value of animals and respect for their lives. Some argue that the revenue generated from trophy hunting is not adequately allocated to conservation efforts or local communities. They claim that corruption, mismanagement, and a lack of transparency often undermine the supposed conservation benefits (McCarthy, 2015). Critics contend that alternative forms of wildlife tourism, such as photographic safaris, can generate comparable or even greater economic benefits without the ethical concerns associated with trophy hunting (Susan-Nicol, 2023). Lastly, there are concerns that trophy hunting can disrupt social structures and dynamics within animal populations, as well as negatively impact genetic diversity. Targeting specific individuals based on their desirable traits can have unforeseen consequences for the long-term health and stability of wildlife populations (McCarthy, 2015).

3.3.2 Endangered species conservation

The conservation of endangered species can be controversial, as it often involves making difficult decisions about resource allocation and the use of public land. Preserving and restoring the natural habitats of endangered species is crucial for their survival. This involves identifying key habitats, creating protected areas such as national parks or wildlife sanctuaries, and implementing measures to prevent habitat destruction or degradation (Merrick and Koprowski, 2017). For species with small populations, captive breeding programs are implemented to increase their numbers. Once the population has grown, individuals are reintroduced into their natural habitat to bolster wild populations and enhance genetic diversity. Illegal hunting, poaching, and the illegal wildlife trade pose significant threats to many endangered species (McCarthy, 2015). Anti-poaching efforts involve increasing law enforcement, strengthening penalties for wildlife crimes, and raising awareness about the detrimental impacts of poaching. Raising awareness about endangered species and their conservation needs is crucial for garnering public support. Educating communities about the importance of biodiversity and the role individuals can play in conservation efforts helps promote responsible behaviour and sustainable practices (Songorwa et. al., 2000). International cooperation and policies: Endangered species conservation often requires collaboration between countries. International agreements, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), establish regulations for the protection of endangered species and regulate the trade in endangered wildlife.

3.3.3 Wildlife overpopulation management

Striking a balance between the welfare of individual animals, the health of ecosystems, and the needs and values of human communities is an ongoing challenge in wildlife overpopulation management. The methods used in wildlife overpopulation management, such as hunting, culling, or fertility control, raise ethical concerns for many people (McCarthy, 2015). Questions are raised about the moral justifications for killing or manipulating animals, especially when alternatives may exist. The welfare of individual animals and the broader ethical considerations of human intervention in natural processes are central to these controversies (Riley et. al., 2006). In addition to that, wildlife management decisions often encounter opposition from various stakeholders, including animal rights groups, conservationists, and members of the public who may have differing values and perspectives. Balancing the interests and values of different groups can be challenging, particularly when opinions on wildlife management diverge widely. Furthermore, it has been noted by some that managing wildlife populations solely

to address overpopulation concerns can have unintended consequences on ecosystems (Susan-Nicol, 2023). Removing or reducing populations of certain species may disrupt ecological interactions and impact other species dependent on them. Altering population dynamics can also lead to shifts in habitat composition or affect biodiversity at various trophic levels. Determining the appropriate management actions and their potential outcomes can be complex due to scientific uncertainties (McCarthy, 2015). Population dynamics, ecological interactions, and long-term consequences of different management strategies may not be fully understood. This uncertainty can lead to disagreements among experts and complicate decision-making processes. Controversies can arise when the perceived necessity or effectiveness of certain management actions is questioned. Critics may argue that non-lethal methods, such as relocation, habitat restoration, or community engagement, should be prioritized over lethal measures. Public perception and awareness of alternative strategies play a significant role in shaping controversies surrounding wildlife overpopulation management (Songorwa et. al., 2000)). Lastly, wildlife overpopulation can lead to conflicts between humans and animals. For example, overabundant species may damage crops, cause property damage, or pose threats to human safety. Wildlife management decisions aimed at reducing these conflicts may still be met with resistance from those who value the presence and natural behaviours of the animals (Stiles, 2004).

In this research, understanding these controversial issues and the extent to which authorities and stakeholders are engaged, helps in the analysis of how the elephant crisis is represented and shaped by the types of solutions that are proposed to it.

4. Theory: Concepts and analytical tools

The focus now shifts to the theoretical framework. This thesis engages the WPR approach as a framework for analysing the tensions between the Zimbabwean government and conservation NGOs in the management and mitigation of the elephant crisis in the country. Inspired by Carol Bacchi (2009), this approach is tailor-made to analyse policy problems by asking the key question 'What's the problem represented to be?' This analytical approach is useful for understanding how problems are 'represented to be' by those who prescribe solutions to them. By engaging this analytical model, I intend to demonstrate that these tensions are not about solving a self-evident problem, but rather emanate from contrasting problem representations.

4.1 The WPR Approach

Bacchi (2009) stipulates that this approach to policy analysis challenges the conventional notion that public policies are solutions to problems that already exist outside the policy process and are just waiting to be identified and fixed. Contrarily, the WPR method claims that policies have implicit representations of the "problems" they are intended to address. Bacchi (2016) argues that policies seem to shape problems rather than address them. These problem-representations are fundamental to how governance functions because they "enact" difficulties as particular categories of problems. With the WPR method, these problem-representations are approached as problematizations that demand careful consideration.

Bacchi's WPR approach is based on the idea that policy problems are not objective or self-evident, but rather are socially constructed through the processes of interpretation and negotiation. These processes involve different actors with different interests, values, and perspectives who compete to define the nature and scope of the problem and its possible solutions (Bacchi, 2016). According to Bacchi, policy analysis should start by asking "What's the problem represented to be?" rather than assuming that a problem is already defined and understood. This

involves a critical examination of the discursive practices and power relations that shape the construction of policy problems, and a consideration of alternative ways of framing and addressing them (Bacchi and Goodwin, 2016).

In this research, rather than adopting the conventional assumption that the elephant crisis in Zimbabwe is a self-evident problem, the thrust is to approach the problem representations by stakeholders as problematizations that need to be scrutinized. Problematizing these problem representations will assist in the understanding the underlying discourses or knowledges that inspire the arguments presented in the conflict pertaining to how the elephant crisis should be managed or resolved.

4.2 The six analytical questions of WPR approach

As a steps guide to performing a WPR approach, the following six questions designed by Bacchi and Goodwin (2016) will guide analytical process:

Question 1: What's the problem represented to be in a specific policy or policies?

In this study, the Zimbabwe elephant crisis is the problem represented is represented in four ways which are:
a. Human-Elephant Conflict.
b. Wildlife Conservation vs Sustainable livelihoods
c. Biodiversity loss and ecological damage
d. Ivory trade ban

Question 2: What deep-seated presuppositions or assumptions (conceptual logics) underlie this representation of the "problem" (problem representation)?

This question interrogates and helps in the analysis of the oversights, presuppositions and assumptions made in the problem-representations of the elephant crisis in Zimbabwe, and in the proposed solutions. A quick example of this is an interrogation of the notion that trimming down elephant numbers will stop biodiversity loss, or that ivory trade is the ultimate solution to the elephant crisis.

Question 3: How has this representation of the "problem" come about?

This question probes the factors and contexts that led to the representations of the problem in a certain way. To some extent, this question was answered in the background and literature review section.

Question 4: What is left unproblematic in this problem representation? Where are the silences? Can the "problem" be conceptualized differently?
The silences imply the 'things/factors' not discussed and/or considered in the problem-representations. This question probes to gain insights on the other side of the story, to see if the problem-representations can be understood differently from the way it has been formulated. It brings into light the oversights, ignorance and taken-for-granted factors in the problem-representations and proposed solutions to the elephant crisis. For instance, rather than solely blaming elephants for biodiversity loss, we can conceptualize biodiversity loss as a consequence of human activities. In short, this question problematizes the problem-solution complexes.

Question 5: What effects (discursive, subjectification, lived) are produced by this representation of the "problem"?

The impacts of the problem representations, or what Bacchi (2009: 70) refers to as the "lived effects," are the subject of question number five. According to the definition of these impacts, they are "the impact of problem representations on people's embodied existence". In the analysis, this question directs the look for outcomes connected to the representations of the problem.

Question 6: How and where has this representation of the "problem" been produced, disseminated, and defended? How has it been and/or how can it be disrupted and replaced?

With this question an insight is gained into the political nature of the elephant crisis in Zimbabwe. It helps in the analysis of the source and context in which the problem-representation was produced, and the justifications forwarded by those who created it. Thus, this question helps to analyse and unearth the knowledge and discourses that the stakeholders (government, activists, and NGOs) base their ideas on by representing the elephant crisis in certain ways, and why they favour certain solutions over others. The question further helps to analyse how the problem-solution complexes can be challenged, either by highlighting limitations of the proposed solutions or by representing the problem differently.

Step 7: Apply this list of questions to my own problem representations.

For this research, questions number 1, 2, and 4 are central to the analysis as they directly address the empirical material gathered. Question number 3 was addressed in the background and literature review section. Regarding question number 5, the focus is on the effects of the proposed solution. Being guided by question number

5, the analysis will be steered towards unearthing outcomes that are related to how the problem(s) are represented.

5. Methodology

This research penetrates the ideas of actors on two distinct levels, i.e., the government or policymakers and the conservationists (i.e., activists and NGOs). The data collected aligns with these two classes and is an expression of their thoughts and proposed solutions regarding the elephant situation in Zimbabwe. Qualitative data was selected which expresses the actors' opinions which are a subject of this research analysis.

5.1 Data selection

5.1.1 Zimbabwe National Elephant Management Plan 2021–2025

To gain insights into the government's reasoning and plans regarding the elephant crisis in the country, I analysed the Zimbabwe National Elephant Management Plan 2021 – 2025 policy document. This is the official document that lays down the government's 5-year plan and official statistics pertaining to elephants and their management in the country. The analysis also factored in some arguments presented by individual government officials in the media and press releases in their justification of the proposed solutions spelled out in the Zimbabwe National Elephant Management Plan (ZNEMP 2021 – 2025). The arguments analysed served as clarifications and explanations to the standpoints adopted by the government in its elephant management plan. In selecting arguments by individual government officials, I chose responses that were given regarding attempts to have the ivory trade ban relaxed and attempts to justify the selling of hunting licenses. From the document I unearthed the following data for analysis using the WPR approach:

- The elephant crisis as it is represented to be by the government in terms of biodiversity loss, economic challenges, human-wildlife conflict, and sustainable livelihoods.
- The proposed solutions to mitigate the crisis.

5.1.2 Wildlife conservation NGOs

The research also included insights from a selection of wildlife conservation NGOs which either focus specifically on elephant conservation in Africa (and some in Zimbabwe specifically); or those which addressed the elephant crisis. As a selection criterion of which NGOs to analyse, I focused specifically on those which had a direct say and response to the elephant crisis in Zimbabwe. The selection was also based on the NGOs that responded and commented on Zimbabwe's effort to have the ivory trade ban uplifted; and reactions to the government's announced plans to elephant mass culling and trophy-hunting. The data was collected to obtain thoughts and opinions of conservation NGOs and animal rights activists in response to the government's ideas of elephant management in Zimbabwe. The information was gathered from websites of NGOs, wildlife conservation blogs, and regional and international news channel reports. Selection of these sources of information considered NGOs that have mission statements that align with elephant upkeeping; and news reports and conservation blogs whose discussions on elephants align with my research aim. There were several websites and blogs which discussed elephant issues, but I narrowed down my selection from global level discussions all the way down to those that commented/reported on the elephant crisis in Zimbabwe directly. In some cases, references and information of the Zimbabwe elephant crisis was either replicated or discussed similarly on different websites, blogs, and channels, such that rather than selecting all the sources I instead selected a few to represent the whole lot (see appendix 1).

My data collection started with a thorough study of the ZNEMP 2021 – 2025 policy document to have a clear insight into the government's main points regarding the management of elephants in the country. This was the most proper document to analyse since the government is responsible for formulating policies on wildlife management in the country. The government is also solely responsible for the regulation of ivory trade and trophy hunting in the country. On top of that I did research on the attempts by Zimbabwe to be exempted from the ivory trade ban and gathered information shared by individual government officials in justification of this stance. Key points of the arguments were noted down, focusing on how the elephant problem was represented and the proposed solutions to it. All the arguments gathered from the government's perspective were matched with direct contrasting arguments from conservation NGOs or activists, to highlight the tensions regarding the problem-solution complex.

Using Creswell's (2014) guide to data coding, I engaged six steps in coding my data. The first step involved organizing the data depending on the source. In this instance, this entailed putting the data into two different categories i.e., government

ideas vs NGOs/activists reactions. The second step involved identifying the general ideas and arguments pertaining to the problem-solution complexes e.g., identifying arguments on elephant culling, trophy-hunting etc. These arguments were further classified into two categories i.e., arguments for or arguments against a certain problem-solution complex. The third step involved coding the data. The data was put into categories and labelled with names, for example all the coded data was classified to fit into the four problem-representation complexes that were mentioned in the previous sections of this research. Using the 6 WPR analytical questions as a guide, the data was further coded into categories like 'silences', 'assumptions', 'impacts' etc. And the final step of coding involved categorising the different justifications for a certain solution. The coding then led to the fourth step of the process which was the generation of descriptions of categories to be analysed. The descriptions are detailed information about the occurrences to be analysed in the data. The fifth and sixth steps involved the development of how themes and descriptions represented the qualitative narrative of this research, completing the process with the interpretation of research conclusions and results.

Bringing all this together, the WPR analysis will give insights into what knowledge or discourses different stakeholders built their arguments regarding elephant management on. It further puts to the light the thought that the elephant crisis in Zimbabwe is shaped by different problem-representations of it by the government and conservation NGOs.

6. Analysis

In this section is a presentation of my WPR analysis of the research findings. The outcome comprises the problem-solution complexes that were identified in the analysis of empirical material. These complexes describe how tensions emanate from contrasting problem representations by the government and conservation NGOs in the management and mitigation of the elephant crisis in Zimbabwe. The analysis also unearthed the various discourses that inspire the arguments of the two conflicting stakeholders, which in turn lead to tensions over the proposed solutions to the crisis.

6.1 Tensions over problem representations

6.1.1 The population conundrum

The analysis discovered that the elephant crisis in Zimbabwe is a debate that emanates from the numbers of elephants in the country and how they should be regulated. The government on one hand claims that there is an overpopulation of elephants in the country, whilst some conservation NGOs are adamant that elephants remain an endangered species. These two contrasting claims have led to different proposed solutions to the crisis with the government advocating for solutions that support the trimming down of elephant numbers, whilst the conservation NGOs are advocating the protection of these animals. The Zimbabwean government has been using local scale and knowledge around carrying capacity to support its notion that the country currently has an overpopulation of elephants. According to the Zimbabwe National Elephant Management Plan (ZNEMP 2021 – 2025): '*the core state protected area (national parks and safari areas) of elephant range in Zimbabwe is close to 42,000 km2. at present this area is carrying more than 70,000 elephants or a crude density of about 1.75 elephants/km2, a density at which woodlands and biodiversity are compromised*. Official statistics according to Zimbabwe Parks and Wildlife Management Authority (Zimparks) estimate that the country has a population of over 100,000 elephants out of the 415,000 elephants that remain in Africa today, yet the carrying capacity can only support around 45,000 elephants (Holtz et. al,

2021). Such a representation of the problem has led the government to draft and propose management plans that are centred on trimming down elephant numbers.

On the other hand, conservation NGOs have a different representation of the same problem. Basing their arguments on global/regional scale and the global elephant crisis, they claim that elephants are an endangered species worldwide and they should be protected at all costs from extinction. For instance, according to Elephant Crisis Fund (2022), '*elephants are facing serious and urgent threats to their survival. African elephant numbers have plummeted from 1.2 million in the 1970's to only around 500,000 alive today. this is a result of illegal hunting for their tusks and body parts, the trafficking and sale of ivory, and the sharp rise of conflict between humans and elephants through an escalation of competition for space and resources.*'
The Elephant Crisis Fund is an organisation against the lethal disposition of elephants across the African continent (Zimbabwe included), advocating wildlife saving alternatives like translocation in places where the elephant numbers are deemed overpopulated (ECF, 2022). The above quotation identifies the problem representation as diminishing elephant numbers globally, that might lead to their extinction. The notion is that despite there being healthy populations of elephants in some parts of the globe, elephants remain an endangered species worldwide and the world is still losing a considerable number to poaching and illegal hunting. Such a representation of the problem calls for management plans that are against the lethal disposition of elephants as control mechanisms of their populations.

Contrasting problem representations of the same crisis have led to tensions about how it should be managed or mitigated. The government's proposals and plans to trim down elephant numbers have been vehemently opposed by several conservation NGOs who insist on preserving the lives of the animals. The whole elephant debate in Zimbabwe comes down to the issue of their numbers, and depending on which school of thought one subscribes to, solutions to this crisis are subject to intense debate.

Silences, assumptions, and impacts of the population debate.

The contrasting representations of the elephant population problem in Zimbabwe has some noticeable silences in the arguments presented by the conflicting parties. For instance, the use of global or regional scales by some conservation NGOs in the assessment of the Zimbabwean elephant crisis does little justice to those dealing with the problem on the ground. Harris (2009), cited in Moren & Rau (2014), stipulates that identifying areas of confluence and convergence between local and

official sustainability concepts can lead to policies which are more implementable by policy makers and adaptable on the ground. Analysis of the data presented above figured out little considerations for local Zimbabwean context by some conservation NGOs in the elephant population debate. Furthermore, an analysis of the arguments forwarded by the Elephant Crisis Fund above indicates that the data and statistics about the elephant population in Africa appears generalized. It fails to disintegrate how the current elephant population is distributed in Africa, highlighting regions or countries where the populations are booming and those where they are critically low. Failure to make such distinctions is an evident cause for tensions as to how elephant challenges should be addressed in different countries. For instance, East Africa suffered more from poaching between 2006 and 2016 than any other region and over ten years, East Africa's elephant population had decreased by over 50% according to the IUCN's 2016 report (Tsavo Trust, 2021). But on the contrary, in 2016, a majority of the world's African elephants were found in Southern Africa, where poaching was not deemed to have had a significant impact. 70%, or 293,000 elephants, of Africa's elephant population lived in southern African countries at the time, and the populations there were thought to be stable (Tsavo Trust, 2021). Such contrasting situations highlight the need to disintegrate the elephant situations according to country/region when debating effective solutions to the elephant crisis.

On the other hand, there are also some silences in the arguments presented by the Zimbabwean government regarding the population conundrum. For example, when mentioning the statistics about elephant numbers above, the authorities omit statistics about elephants that migrate from Botswana into Zimbabwe during the dry season. Previous studies have demonstrated that elephants roam widely across borders and through regions of natural vegetation in the KAZA region, underscoring the necessity of cross-border movement corridors and coordinated planning and policy (Tshipa et. al, 2017). Elephants migrate during the start of the rainy season because rainfall diminishes as one heads west from Zimbabwe to Botswana causing temporary swelling of their numbers during the wet season. An analysis of the data presented above shows that failure to account for elephant migration when dealing with their numbers might lead to the mistake of thinking that they are overpopulated, yet in real sense it might only just be a seasonal increase. In addition to that, the data analysed above shows inconclusive evidence of elephant overpopulation. There have been allegations that the overpopulation of elephants in Zimbabwe is a political creation rather than a self-existent problem (Patel, 2015). Some critics argue that by exaggerating the elephant numbers, the government is trying to achieve an agenda of disposing of some elephants to generate revenue through ivory trade, trophy hunting etc. According to various government estimates, Zimbabwe's elephant population ranges from more than

50,000 to 100,000. Rodrigues of the Zimbabwe Conservation Task Force, a non-profit group, though, believes that the numbers are far lower. Since 1997, the authorities have not carried out a formal audit of the elephant population, he claimed (Patel, 2015). He argued that these numbers were exaggerated by the government to support the selling of elephant calves. According to Rodrigues, the Great Elephant Census, a project run by American philanthropist Paul G. Allen to estimate the number of elephants in southern Africa by 2016, has so far counted roughly 20,000 elephants in the past year (Patel, 2015). Such a contrast in the statistics to those presented by the government leads a to a different problem representation of the elephant crisis that calls for a different approach to solve it; hence the cause of tensions in the management and mitigation of the elephant crisis.

6.2 Implications of the population conundrum

6.2.1 The human-elephant conflict

Among the problems associated with elephant numbers in Zimbabwe is the human-elephant conflict. An analysis of the Zimbabwe National Elephant Management Plan (ZNEMP) 2021 – 2025 indicates that the human-wildlife conflict is one of the major problems represented in the policy document. The point emphasized is that if the current elephant numbers remain unregulated, the human-elephant conflict may continue to escalate. To some degree, the government represents the human-elephant crisis as a problem of elephant overpopulation, basing its claims on discourses of wildlife overpopulation. This discourse stresses that animals that are overpopulated and famished will venture into human territories in quest of food because of their fundamental survival instincts (Petersen et. al, 2010). Overcrowded animals frequently stray into regions where people live. Animals are killed on the highway, there is property damage, and there are injuries to people. Reports assert that elephants are nearly doubling the country's carrying capacity of 55,000 with an estimated population of 100,000, and they frequently visit villages in groups of 50 to 60, leaving behind unfavourable traces of their unpleasant stops in villages like Sibambene, Sithembile, Mpilo, and Pelandaba in Tsholotsho, while wreaking havoc. Chief Tsovani and headman Mpapa of villages that are close to Gonarezhou National Park in Chiredzi (Gono, 2022). "*We've had this issue for a while, but it's getting worse since the elephant population is growing every year, which leads to conflicts with people for territory as they try to expand their influence beyond the confines of Zimparks,*" Vincent Gono told 'The Chronicle' via Africa in News in

2022 (Africa News, 2022). Over the years, there have been reported cases of human losses due to clashes with elephants. According to ZimParks' website, there were more than 50 injuries and 60 fatalities in 2020 because of the rising wildlife-human conflict. It was a rise of more than 50% from the previous year (Matsengarwodzi, 2022). On the flipside, statistics from one national park (Hwange) indicate that in 2021 alone, almost 150 elephants were either killed or severely injured by humans in acts of retaliation or through poaching. ZimParks argue that the elephant population has outgrown the capacity of national parks to contain them, and elephants now often encroach human habitats and farms in search of food and water, resulting in increased human-elephant conflict (Songorwa et. al., 2000).

One factor in the human-elephant conflict is an unnaturally high elephant population per given area, but another factor is the growing encroachment of human settlements into the "buffer zones" that connect protected areas. Some wildlife conservationists represent the human-elephant crisis as a problem of human factors negatively impacting elephants and their habitats. Thus, they base their arguments on knowledge of negative impacts of human activities on ecosystems and wildlife habitats. This is a direct contradiction to the government's representation of the same crisis as a problem of elephant factors. Claims by conservationists are that poaching causes disruptions to elephant migration patterns because the animals want to stay in regions, they believe to be safer, which increases the strain on local resources. Elephants that have witnessed family members being slain by poachers are believed to act violently against people. Africa Wildlife Foundation (2022) asserts that due to the strong demand for wood fuel used in tobacco production and the widespread usage of firewood by rural populations, notably in Zimbabwe's Hurungwe communal lands, deforestation has intensified. Poor communities are claimed to be gathering firewood at an unsustainable rate, which is causing problems with food security and reduced habitats for elephants and wildlife in general. People continue to turn to poaching as a means of subsistence and money since the degraded soil makes it impossible to produce crops (Africa Wildlife Foundation, 2022).

Silences, assumptions, and impacts of the human-wildlife conflict.

Regarding this problem representation, the analysis identified the underlying assumption by authorities in Zimbabwe that the conflict is largely a result of overpopulation of elephants. Such a stance has led to proposed solutions which are human focused, and it comes with some notable oversights. There are other factors besides elephant numbers which contribute to the escalation of this conflict which the government fails to mention. For instance, research has shown that most of the national parks in Zimbabwe do not have fence barricades to deter elephants from

freely roaming into human settlements (Songorwa et. al, 2000). In other instances, clashes escalate when humans encroach the national parks in search of firewood and grass for house thatching, especially in Gonarezhou National Park.

Wildlife conservationists have also come to the defence of elephants whilst citing other contributing factors to the same conflict. For instance, some conservation NGOs highlight how the human-elephant conflict is being escalated by the destruction of forests and other natural habitats due to human activities. It is argued that the conflict is particularly acute in areas where human populations are growing rapidly, and land-use practices are changing rapidly (Petersen et. al., 2010). These changes often involve the conversion of elephant habitat into agricultural land, logging, mining, and urbanization, which create barriers to elephant movement and disrupt their natural migratory patterns. This representation of the problem has called for solutions by conservationists that are elephant focused. However, such arguments by conservationists have some notable silences. For example, in recent years it has been shown that elephants are feeding on cultivated crops even if the natural habitat provides sufficient forage (Gross, 2019). High nutritional value, the low natural defence and the easy access to cultivated crops is believed to make them highly attractive to elephants (Gross, 2019). Analysis of the data presented above also shows that the human-wildlife conflict is a very complicated topic that affects not only the biological and behavioural elements of wildlife species, but also the social, cultural, political, and economic levels. Tensions in the management and mitigation of the conflict appear to emanate from focusing on rectifying only one side of the causal factors.

6.2.2 Biodiversity loss

In its arguments against preserving high elephant numbers, the Zimbabwean government emphasises the role played by elephants in the loss of biodiversity. For example, as recorded in the ZNEMP 2021, '*the government highlights the dilemma that arises between attempting to protect as many elephants as possible at all costs on one hand, and to preserve a full range of plant and animal species in protected areas on the other hand. it is cautious of the consequences of making single resource decisions (e.g., preserving all elephants) that can result in multiple resource consequences (e.g., loss of large trees, plant and bird species, and diversity generally).*' The problem representation identified from this quotation is elephant overpopulation, negatively impacting biodiversity conservation. Such a representation of the problem has prompted proposed solutions that aim at trimming down elephant numbers. It can be inferred from the statement that if the current elephant population is left unchecked, then a lot of biodiversity will be lost. Such

reasoning is influenced by discourses surrounding biodiversity conservation. These discourses emphasise the protection, management, and maintenance of ecosystems and natural habitats in order to maintain their health and functionality (UNEP, 2013). They reason that an ecosystem's food chains are directly impacted by biodiversity loss. The three targets that were adopted as a matter of policy in 1997, and are retained, by the Zimbabwe Government in its National Elephant Management Plan 2021 -2025 are:

1. To maintain at least four demographically and genetically viable elephant populations in Zimbabwe
2. To maintain or increase the core protected area range of elephant in Zimbabwe
3. To maintain numbers / densities of elephant at levels that do not adversely impact on biodiversity conservation goals, while contributing to economically viable and sustainable wildlife-based land uses in Zimbabwe.

The government claims that at present the crude density is pegged at 1.75 elephants per square kilometre, a density at which woodlands and biodiversity are compromised (ZNEMP 2021). Its argument is that conserving high numbers of elephants will have devastating effects on vegetation and other animal species. This is because at densities as low as 0.3 elephants per square kilometre woody plant species can be lost and species diversity of birds and invertebrates reduced (Matsengarwodzi, 2022).

On the contrary, several conservation NGOs have opposed the notion that there is an over-population of elephants, and unlike the government they emphasise human activities as the major contributors of biodiversity loss. For example, according to Africa Wildlife Foundation (2021), '*Zimbabwe is losing approximately 20 percent of natural forest annually through deforestation, specifically for tobacco curing. illegal settlements, wood traders, and poachers come to areas right outside of protected parks, like Mana Pools and Chewore safari area, and illegally cut down tree species resulting in increasingly deforested areas outside of protected areas. this deforestation, in turn, results in significantly reduced habitat available to wildlife in the buffer zones adjacent to protected areas as well as fragmented wildlife migratory corridors.*' Such a different representation of the problem results in calls for solutions that exonerate the elephants. It has led to tensions on how elephants should be managed to stop biodiversity loss. The government is advocating for solutions that are human centric, whilst some conservation NGOs are calling for human centric solutions. All this emanates from their contrasting problem representations of biodiversity loss. Whilst drawing their arguments from discourses on biodiversity conservation, they differ from the government's standpoint in that they see elephants as critical components and positive

contributors to biodiversity. Such a representation of the problem has led to strong calls to protect elephants and their habitats at all costs, differing from the government's proposed solutions of trimming down their numbers. In addition to that, other conservation NGOs argue that elephants are a critical component of biodiversity rather than a threat to it. For instance, World Wildlife Fund (2021) asserts that in addition to having a direct impact on the composition and density of the forest, dispersing seeds, and changing the overall landscape, elephants play a crucial role in forming their habitat. Elephants make holes in the canopy and other openings in tropical forests, which promote the regrowth of trees (World Wildlife Fund, 2021).

Silences, assumptions, and impacts of biodiversity loss as a representation of the elephant problem.

Through a WPR analysis it can be argued that the government seems to be over-emphasizing the issue of damage caused by elephants to the environment, whilst paying little attention to human activities and other animals also contributing to this conundrum. The following comment made by the spokesperson of ZimParks to Al Jazeera news supports this notion. "*We have vultures that breed in trees. The vultures are no longer breeding in Hwange (National Park); they have moved to other places because elephants have the habit of knocking down trees,*" Tinashe Farawo, spokesman of the Zimbabwe Parks and Wildlife Authority (ZimParks) told Al Jazeera (Al Jazeera news, 2021). Authorities (i.e., the government and national parks management) contend that a surge in elephant numbers threatens other species by destroying their habitats and has increased the potential of dangerous human-wildlife encounters, with dozens of fatalities in recent years (BBC News, 2022). Such a representation of the problem results in solutions which are mainly centred around cutting down the elephant numbers, yet a holistic approach is necessary when trying to resolve the problem of biodiversity loss. In terms of impact, if biodiversity loss is largely blamed on elephants alone, there runs a risk of 'correcting' only one side of a multi-faceted problem. The analysis identified an assumption by the Zimbabwean government that trimming down the elephant numbers can stop biodiversity loss on its tracks, and this is a cause of tensions with some conservation NGOs. Analysing this from a personal point of view, biodiversity loss might continue due to other factors, even after trimming down the elephant numbers. A WPR analysis of the arguments presented by the government officials shows an over reliance on a single discourse or knowledge when framing their arguments on elephants and biodiversity loss. By assessing the statements above, one can easily pick up the bias against elephants. In the materials analysed here there are notable silences which I feel should be discussed and analysed, being

guided by the WPR approach question 4. For example, worldwide it is a known fact that human activities are one of the biggest contributors to biodiversity loss (Songorwa, 2000). This argument justifies the point that the problem with biodiversity loss can be represented differently with elephants exonerated to some extent. On top of that, the data analysed data above presents inconclusive evidence of what scales the government and national parks are using to measure the amount of damage inflicted by elephants to biodiversity. This runs the risk of exaggerating the impact elephants have on biodiversity loss and results in calls for drastic solutions to this problem. Having a holistic approach to the biodiversity loss problem will lead to a different representation of the elephant crisis and eliminates tensions among stakeholders about it should be resolved.

The damage inflicted by elephants on biodiversity should neither be downplayed nor overemphasised. The analysis identified that tensions are rampant when it comes to this problem representation because both the government and the conservation NGOs are basing their arguments on contrasting discourses with little room for compromise.

6.2.3 Liabilities or assets?

Livelihoods

The elephant population crisis in Zimbabwe has led to intense debates between the government and conservation NGOs on whether these animals are assets or liabilities. One of the reasons cited by the Zimbabwean government against maintaining large elephant numbers is that they affect human livelihoods when they encroach people's farms and damage their crops and livestock, hence the need to keep their numbers in moderation. On top of that, elephants have some economic value (derived from trophy-hunting, game meat provision etc.), and the government regards them a gateway to sustainable livelihoods, especially among poor rural communities (Matsengarwodzi, 2022). Such a problem representation is derived from livelihoods discourse and knowledge. The sustainable livelihoods discourse focuses on understanding of how the underprivileged make a living. It groups the variables that limit or improve living opportunities and demonstrates how they are related (Ellis, 2000). The government has long since claimed that local communities benefit from the elephants and elephant by-products that the nation possesses (Matsengarwodzi, 2022). The provision of game meat and hides from elephant carcases from trophy hunting and culling are some of the direct incentives

to local communities aimed to enhance their livelihoods. Through the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) of Zimbabwe, the government permits the residents of communal lands – basically the poor rural communities – to share in the benefits generated by wildlife utilization on those lands by granting appropriate authority to Rural District Councils (RDCs) to manage wildlife on communal lands with revenue being paid to the wards and to the councils (ZNEMP, 2021). By doing this, the government hopes that local communities' attitudes towards elephant conservation and tolerance will be improved. About 90% of CAMPFIRE's revenue comes from hunting, with elephant hunting contributing more than 70% of annual revenue (ZNEMP, 2021).

Several conservation NGOs are against the government's aim to achieve sustainable livelihoods for local communities through the disposition of some elephants (through trophy hunting or culling) to generate revenue. Their reasoning is that such strategies pose a threat to the elephant numbers and there are alternative ways of achieving sustainable livelihoods through wildlife conservation. Thus, they base their arguments around discourses of wildlife conservation and knowledge of income generation through sustainable, non-lethal use of wildlife. For instance, Katarzyna Rybarczyk commenting to African Liberty in 2021 said, "*The economic contribution of elephant trophy hunting is relatively small, and there are other, more sustainable ways of generating income for the conservation of elephants, for example, photographic wildlife tourism or safari holidays. The promotion of such activities could allow impoverished regions in Zimbabwe, and elsewhere in Africa, to generate income and preserve elephants without having to kill members of this vulnerable species.*" Other activists build their arguments on the discourse of corruption/deprivation, claiming that local communities do not benefit that much from trophy hunting, as proceedings are usually lost to corruption and mismanagement. Doctor Mark Jones, Head of Policy for Born Free (an international animal welfare charity), said: '*Trophy hunting deprives local people of their heritage, and the opportunity to benefit from non-destructive wildlife tourism, which generates far more money than trophy hunting ever can.*' Concerns have been raised over the lack of transparency in the administrative side of trophy hunting in Zimbabwe, with some economists claiming that only 3% of the revenue generated reaches local communities (African Liberty, 2021). Arguments built from such contrasting discourses to the government's result in tensions with the government on how sustainable livelihoods can be achieved using elephants.

National Parks Upkeep

The government's arguments in commercialising elephants are derived from utilitarian discourses. Utilitarian arguments explain the environmentalist position concerning the preservation of natural objects as long as human attitudes toward preservation are considered along with the direct benefits of environmental preservation (Katz, 1979). This type of utilitarian justification though, is biased in favour of the satisfaction of human preferences (Katz, 1979). Among the arguments mentioned against having a high population of elephants, is the point that they have a high maintenance cost. The Zimbabwean government has often cited the economic challenges it is facing in the upkeep of elephants in the country. "*The elephants also must take care of themselves, so we must be allowed to trade for that to happen. This means that money must be generated, revenue coming off the elephants. Right now, tourism is dead, so people aren't coming to see the elephants,*" Tinashe Farawo, spokesman of the Zimbabwe Parks and Wildlife Authority (ZimParks) told Al Jazeera in April 2021 (Al Jazeera, 2021). Furthermore, the park management reports that it is currently spending more than US$500,000 annually on water alone for the national parks (Zimparks, 2021). They further report that the areas under park vis-à-vis the rangers present to perform the anti-poaching tasks and wildlife monitoring is highly disproportional. The parks state that it does not have enough budget to employ more game ranchers and provide other resources needed for these tasks. The ranchers often lack protective gear and in 2021, 9 ranchers lost their lives to wildlife (Zimparks, 2021). The shortage of ranchers is said to leave a significant portion of the park unmonitored, and this has resulted in isolated cases of poaching within the parks. Between 2015 – 2021, the ranchers are said to have removed almost 2000 elephant snares set up by poachers. Though the numbers decreased significantly over the years, poaching remains a significant threat to the elephants and other wildlife (Matsengarwodzi, 2021). Elephants are poached for their tusks, hides and in some cases flesh for food. Among the proposed means of generating income from elephants include trophy-hunting, ivory trade, and transfer to zoos. Presentation of these costs and expenses against the government's (and national parks') incapacity to cover them leads to the representation of the elephant crisis as a problem of national park upkeep challenges. And such a representation leads to tensions with some conservationists who are against the idea of strategically disposing of wildlife. Their arguments are built on wildlife conservation and preservation discourses that claim that elephants are a critically endangered species whose numbers and welfare should not be tempered with. Such NGOs have opposed the government's ideas of putting a price tag on elephants and its endeavour to use them to bail national parks out of their financial woes. These NGOs argue that revenue should be generated through non-lethal use of wildlife in national parks.

Silences, assumptions and impacts of commercialising elephants.

From a WPR perspective lens, one can decode that the need to generate revenue for national parks and community livelihoods has led to the shaping of an elephant crisis in Zimbabwe by the government. An analysis of the data above shows that the government's emphasis of improving community livelihoods and national parks through the strategic disposition (through trophy hunting or culling) of some elephants results in tensions with some conservation NGOs. Apart from wildlife conservation concerns, part of the tensions is sparked by corruption allegations against the government and the authenticity of livelihood concerns raised by the government. For instance, previous research has shown that there is little evidence of accountability of the government to prove that local communities truly benefit significantly from wildlife proceedings and outputs (McCarty, 2015). Concerns are raised about the money never reaching local communities because Zimbabwe is one of the most corrupt nations in the world, ranked 157th out of 180 nations in the 2020 Transparency International Corruption Perceptions Index (Risk Indexes, 2020). Funds are often untraceable, and the administrative side of elephant trophy hunting is not always clear. An analysis of the statistics presented in the ZNEMP 2021 – 2025 regarding CAMPFIRE achievements in the past are impressive; but the government has little evidence to show that communities received such amounts of money. Poverty remains strife in communities surrounding national parks and there is little or no infrastructural development to support these claims (Semcer, 2019). There are also notable silences regarding alternative ways of generating revenue from elephants like photographic tourism and safari holidays. There are also important effects on the ways that this issue is talked and thought about. For example, the problem representation by the government closes off considerations of other reasons why trophy-hunting might not be a viable solution to the socio-economic woes in Zimbabwe. For example, there are worries that trophy hunting may harm genetic diversity, alter animal population dynamics, and upend social structures. The long-term stability and health of animal populations may suffer if certain individuals are targeted because of their desirable qualities (McCarthy, 2015).

On the other hand, arguments by conservation NGOs that trophy hunting is not a viable solution to the economic woes also have some notable silences. For example, past research has shown that the local communities can gain from trophy hunting by the creation of job possibilities, revenue, and other advantages. Hunting profits can be invested in community needs including education, healthcare, infrastructure, and other necessities, enhancing livelihoods, and reducing poaching (Semcer, 2019). To add to that, dismissing trophy hunting in favour of alternative ways of generating revenue like photographic safaris comes with some short falls. As was

the case during COVID 19 when tourism was on the low due to travel restrictions, Zimbabwe's wildlife business took a serious hit as a result and trophy hunting was one quick way to aid its recovery (Matsengarwodzi, 2021).

6.3 Tensions over proposed solutions

6.3.1 Culling

Claims by the government that the country has an overpopulation of elephants have prompted it to propose culling as a possible solution to this alleged problem. Basing its arguments on wildlife population control discourses and using local ecological knowledge and scale to frame its arguments; the government reasons that elephant population control is necessary to alleviate biodiversity loss and the human wildlife conflict instigated by high elephant numbers. In 2021, the government of Zimbabwe announced its intention to cull up to 500 elephants in the country's game reserves (Al Jazeera News, 2021). The government claims that culling is essential to control the elephant numbers, which have boomed beyond the carrying capacity of the national parks. "*We are trying to see ways in which we can reduce the numbers. we have to discuss it at policy level as government. options are on the table, including culling,*" Mangaliso Ndlovu, the Environment, Climate, Tourism and Hospitality Minister, said in May 2021 in an interview carried out by the state controlled Zimpapers Television Network (BBC News, 2022). The gist of the government's policy document, the Zimbabwe National Elephant Management Plan 2021 – 2025 is on maintaining elephant numbers at levels that would enable them to contribute to the conservation of biodiversity, national development, and cultural heritage (Matsengarwodzi, 2021). By representing the elephant crisis in Zimbabwe as a problem of elephant overpopulation, the Zimbabwean government thereby prescribes culling as one of the effective solutions to it.

However, the proposed culling has been met with strong opposition from conservationists and animal welfare advocates. Basing their arguments on wildlife conservation and animal welfare discourses they assert that culling is inhumane and a threat to elephant species. The Centre for Natural Resource Governance (CNRG), an environmental and human rights watchdog in Zimbabwe documenting poaching, vehemently opposed the plan to cull some elephants as a way of reducing their booming population. "*Culling will eventually lead to extinction of these elephants*," CNRG spokesperson Simiso Mlevu told Al Jazeera (Al Jazeera News, 2021). "*This*

is just the beginning," he said. "*Very soon we will be forced to travel to other countries just to see an elephant,*" he emphasised. Other international organizations use regional scale and knowledge in their defence of elephants from culling proposals. For example, the African savanna elephant was deemed "endangered" by the International Union for Conservation of Nature (IUCN), while the African forest elephant was categorised as "critically endangered," both due to habitat degradation and an increase in poaching (Muchinjo, 2021). Such a problem representation of the elephant crisis has led to hot debates with the Zimbabwean government which claims that it has an overpopulation of elephants.

Silences, assumptions and impacts of culling as solution to elephant overpopulation.

The use of local scale and ecological knowledge by the government to frame its arguments about elephant overpopulation in the country has led to its justification of culling as a possible solution. This problem-solution has been a cause of heated debates between the government and conservation NGOs. Root cause of these tensions is the use of different scales to define the elephant situation generally. Authorities in Zimbabwe argue that whilst elephants are endangered worldwide, the situation is quite opposite in the country. The conservation community debates whether it is effective to manage both species and the environment where they live using ecological carrying capacity as a guide. The concept of "excess" elephants is contested by Ross Harvey of 'Good government Africa', a non-profit organization dedicated to research and advocacy for better government on the continent (Matiashe, 2021). He argues that this concept is built on a pretext that there is a certain 'carrying capacity' for elephants per square kilometre, but that notion has also been debunked by numerous recent scientific papers (referring to studies from 2018 and 2006 that focused on South Africa's Kruger National Park as examples). Furthermore, use of global scale to define the elephant situation by conservation NGOs has led to the opposition to Zimbabwe's elephant culling plans. This opposition has been argued to be hindering the resilience of local national parks amidst the elephant debacle. Hornborg (2013) argues that the currently burgeoning discussions on 'socio-ecological resilience' tend to mask the power relations, contradictions of interest, and inequalities that to a large extent determine how humans utilize the surface of the Earth. This is the case with the current talk of managing the elephants in Zimbabwe. A lot of power struggles, based on conflicting interests, are happening between the government, park management and nature conservationists, beneath the general resilience discussions. The failure to separate the Zimbabwean elephant context from global and regional contexts has led to disagreements on how to tackle the Zimbabwean elephant crisis.

Bringing together all the above arguments, it is apparent that the elephant crisis in Zimbabwe is a political construct, created by policymakers through different representations of the problem.

6.3.2 Trophy-Hunting

As part of its solutions to lessen its economic woes and improving livelihoods, the government suggests that trophy hunting is quite efficient in solving this problem. Its arguments are derived from discourses of economic benefits from wildlife. In all its arguments for supporting trophy hunting, culling etc., the government reiterates its commitment to allocate a significant portion of the proceedings to local communities in support of their livelihoods (ZNEMP, 2021). Basing on claims that the country has an overpopulation of elephants, the government feels at liberty to dispose a fraction of them through licensed hunting, without compromising its conservation efforts (Matsengarwodzi, 2021). Apart from the economic benefits of trophy hunting, authorities also reason that licensed hunting aids in the trimming down of elephant numbers. Trophy hunting has reportedly improved the food and livelihood security of rural residents as well as helped to reduce human-wildlife conflict; and according to reported figures, the hunting industry in CAMPFIRE districts made almost $17 million between 2010 and 2018 (Booth et. al, 2022). Of this total, trophy fees made up around $12 million, of which elephant trophy fees made up about $7.6 million (63%) of the total. In addition to that, the government reasons that revenue generated from trophy hunting is critical for funding its upkeep of national parks and conservation efforts (see discussion above on national parks upkeep). In April 2021, Zimbabwe said it intended to sell hunting licences to kill 500 elephants to generate revenue for the upkeep of its national parks (Muchinjo, 2021). Depending on the size of the elephant, trophy hunters can expect to spend between $10,000 and $70,000. According to Tinashe Farawo (ZimParks chairman), "*elephants must pay for their upkeep*" and that the 500-elephant hunting quota, is permitted by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In justification of such a proposal, Farawo claimed that ZimParks, a government organisation, needs at least $25 million annually to operate. However, the cash-strapped government of Zimbabwe has not given the organisation any money since 2001 (Al Jazeera News, 2021).

The government's aim to generate revenue through trophy hunting is not fully supported by some conservation NGOs. Basing themselves on wildlife conservation knowledge, their reasoning is that such strategies pose a threat to the elephant numbers and there are alternative ways of achieving sustainable livelihoods through wildlife conservation (African Liberty, 2021). For instance,

Katarzyna Rybarczyk commenting to African Liberty in 2021 said, "*The economic contribution of elephant trophy hunting is relatively small, and there are other, more sustainable ways of generating income for the conservation of elephants, for example, photographic wildlife tourism or safari holidays. The promotion of such activities could allow impoverished regions in Zimbabwe, and elsewhere in Africa, to generate income and preserve elephants without having to kill members of this vulnerable species.*" Other activists claim that local communities do not benefit that much from trophy hunting, as proceedings are usually lost to corruption. These activists build their ideas on the discourse of corruption/deprivation. BORN FREE, an international animal welfare charity, revealed that very little money from trophy hunting reaches local communities (Muchinjo, 2021). Instead, as Doctor Mark Jones, the organization's Head of Policy, said: '*Trophy hunting deprives local people of their heritage, and the opportunity to benefit from non-destructive wildlife tourism, which generates far more money than trophy hunting ever can.*' (African Liberty, 2021). Furthermore, other activists frame counter arguments against trophy hunting basing their ideas on animal welfare discourses. For example, according to Audrey Delsink, wildlife director for Humane Society International/Africa elephant killing has "*a traumatic effect on the remaining population.*" Such representations of the problem have resulted in tensions with the government over whether trophy hunting is an effective and sustainable solution to the elephant crisis in the country or not.

Silences, assumptions and impacts of elephant trophy hunting.

A WPR analysis of the data above shows that the Zimbabwean government has presented the elephant crisis as a problem of socio-economic challenges that can be partly solved by licensed elephant hunting. The Zimbabwean government argues that this strategy benefits local people by boosting the local economy and giving parks access to funding for operations during slow tourist seasons (Matsengarwodzi, 2021). This notion is disputed by animal activists who believe that the livelihoods card played the government is a trophy hunting promotion gimmick. As an example, in an interview by Doctor Mark Jones for BORN FREE in 2022, Nomsa Dube argued that since decades, trophy hunting has been practiced in Zimbabwe, even though the country's wildlife is still declining, extinction rates are increasing, and the local population continues to endure extreme poverty (BORN FREE, 2022). "*The local people live in fear. Government officials and hunting bodies decide what happens; the communities don't really have any say. They are used as pawns in this trophy-hunting game so that tens of thousands of dollars can be deposited into foreign bank accounts. That money never returns to Africa,*" she remarked. The cause of contention is that some conservation NGOs regard the government's ideas as failing to meet the sustainable livelihoods

threshold, since local communities hardly have a say in the administration of trophy hunting. From a WPR perspective lens it is apparent that using the livelihoods and economic discourses/knowledge alone to justify trophy hunting leads to tensions with conservation NGOs. Furthermore, this problem-solution representation by the government does not mention certain important aspects. For instance, there are notable silences or less emphasis regarding alternative ways of generating revenue from elephants (e.g., photographic tourism and safari holidays); and considerations of other reasons why trophy-hunting might not be a viable solution to the socio-economic challenges in Zimbabwe. This has sparked controversies with conservation NGOs which insist on generating revenue through non-lethal use of wildlife.

On the flipside, conservation NGOs, in their opposition to Zimbabwe's licensed hunting attempts, seem to overlook the benefits trophy hunting brings to the country's wildlife management and conservation efforts. This has sparked serious debates with the government, which sees elephant hunting as a gateway to economic liberty. For instance, at the peak of the COVID-19 pandemic, tourism in the country was at its lowest ebb, due to travel restrictions and the results were detrimental to wildlife management (Matsengarwodzi, 2022). To aid in its recovery from this debacle, the government suggests that licensed elephant hunting is a viable option. The use of contrasting discourses and knowledge by the government and conservation NGOs when framing arguments for or against trophy hunting appears to be the reason why this conflict seems intractable. The decision to sell hunting licences, according to Zimparks, is essential for animal population control and will produce income to support its operations, which were hampered by a drop in visitors because of the coronavirus outbreak (Matiashe, 2021). All these debates and deliberations serve as proof that the elephant crisis in Zimbabwe is not a self-existing problem, but rather a concrete conflict of how the problem is interpreted and represented by different stakeholders.

6.3.3 Ivory Trade

The Zimbabwean government has been advocating the uplifting or temporary relaxation of the ivory trade ban enforced by CITES in 1989, as this would enable it to auction its tons of stockpiled ivory worth millions of United States dollars (News24, 2022). Part of its reasoning is that the income generated through ivory trade might be used to maintain the nation's game reserves and biodiversity at large. "*Zimbabwe Parks and Wildlife Authority [ZimParks] requires $20 million to $25 million a year to fund its wildlife conservation activities. It costs us tens of thousands a month for storage and security of that stockpile (of ivory), money that*

could otherwise be used for conservation. The COVID-19 pandemic has also negatively affected revenue which has affected management effectiveness," ZimParks director Fulton Mangwanya told Mongabay on the sidelines of the conference, which took place from May 23-26 at Hwange National Park, in north-western Zimbabwe. Framing its arguments on discourses of economic benefit and wildlife conservation, the government and national parks authorities reason that revenue generated from ivory trade will also aid in the conservation of elephants by improving anti-poaching schemes and help to reduce the human-elephant conflict (Matsengarwodzi, 2021). "*We face challenges of limited staff, lack of ranger patrol equipment and supporting services. We need to purchase planes; we don't have any at the moment. We need over 100 vehicles, every region in the country needs graders, tippers, drones for surveillance. If we are allowed to sell our ivory stockpile, all proceeds from ivory sales will fund conservation in our wildlife parks and support communities that live near parks and bear the brunt of conflict with the wildlife,*" added Fulton Mangwanya. Thus, basing their arguments on livelihoods and wildlife conservation discourses and knowledges the authorities propose ivory trade as an ultimate solution to the country's socio-economic and ecological problems.

On the contrary, the idea of legalising ivory trade has triggered the fears of conservationists. There are concerns that such a move will cause a high demand for ivory which will in turn lead to increased poaching of elephants (Harvey, 2016). Basing their arguments on knowledge of preserving endangered species, their worry is that resuming the legal ivory trade will be fraught with risk, which no amount of money could possibly make up for, given that all three species of elephant populations are still endangered, and unlawful slaughter is still occurring. Most conservation NGOs concur that more complex, long-term finance methods and processes are required for protected areas, biodiversity conservation, and community benefit, but are against the notion that ivory trade should play a substantial part (if any) in such programs (Petersen et. al., 2010). Lindsey Smith, senior wildlife campaigner for the Environmental Investigation Agency, an NGO whose research and analysis formed part of the argument for the original CITES ban in 1989, told Mongabay in an email that any legal sales of ivory risk reigniting demand and stimulate poaching. "*Coupled with the fact that elephant populations of all three species are decreasing, and illegal killing continuing, resuming legal ivory trade will carry with it considerable risk that no potential monetary benefit can allay,*" Smith wrote. Critics of ivory trade also claim that CITES once authorised one-time sales of ivory in 1999 and 2008 that led to a substantial increase in the killing and poaching of elephants across Africa; and that legalising the ivory trade could lead to the extinction of African elephants (Mongabay, 2022). Such a representation of the problem has led to tensions between the government and conservations NGOs regarding how the issue of ivory trade should be handled.

Unlike the government which sees ivory trade as possible solution to the elephant crisis, these conservationists regard it as threat to elephant conservation efforts.

Silences, assumptions and impacts of the ivory trade debate.

One of the main arguments forwarded by some of the NGOs above deduced that ivory trade is considered an instigator of elephant poaching. A WPR analysis of the data presented above shows that there seems to be an assumption from conservation NGOs that sanctioning a once off sale of ivory can trigger demand for it, resulting in an increase of incidents of illegal poaching of elephants. The development of this problem representation over past decades is related to the incidents of increased elephant poaching that resulted from legalized ivory trade in 1999 and 2008. Effects of this problem representation are shown to have created fears of elephant extinction. However, Stiles (2005) disputes this notion, arguing that there is scant evidence to back up assertions that the 1999 southern African ivory auctions increased elephant poaching or the market for ivory. He further argues that elephant poaching, and illegal ivory trade levels are more likely to be correlated with wildlife management strategies, law enforcement, and corruption than with the selection of CITES appendix listings and the ensuing scope of trade restrictions. Another striking assumption is how conservation NGOs undermine local government's ability to effectively manage and protect its wildlife resources. If the official statistics about elephants are to be believed, the Zimbabwean government has done an efficient job in conserving elephants amid this global elephant crisis. Zimbabwe's conservation efforts, coupled with international policies on endangered species have caused the nation to have the second largest population of elephants on the planet (Matsengarwodzi, 2021). This is amidst the global decline in elephant numbers. Considering this argument, it appears as if Zimbabwe has the capability of dealing with the cumulative effects of ivory trade.

The objection by the international community to Zimbabwe's efforts to sell its stockpiled ivory is undermining the country's alleged right to utilise its natural resources. The analysis identified that most of the countries that are setting up rules and regulations pertaining to elephant trading are countries who do not bear the burden of elephant maintenance (i.e., they either have very few or no elephants at all). In 2016, the United States put an almost complete prohibition on the trade in elephant ivory into effect (WWF, 2021). The United Kingdom, Singapore, Hong Kong, and other elephant ivory markets soon followed. Most significantly, at the end of 2017, China took the extraordinary action of closing its domestic legal ivory market (WWF, 2021). Proposals from Southern African countries for further ivory sales (after 1999 and 2008 once-off sales) at the two last CITES conferences failed,

and the latest call has also been rejected by a bloc of 28 other African elephant range states, as well as by conservation organizations (Machamire, 2022). Such moves are believed to hinder the country's conservation efforts and rights to benefit from its natural resources. The country's economic rehabilitation programs, according to finance minister Patrick Chinamasa, have been hindered by the ban on the trading of ivory (Bhebhe, 2016). "*This is the paradox of Africa, where we are rich, but poor because our policies are prescribed to us by countries that do not have the animals. They ban us from selling our stock and yet these countries, which make decisions at CITES, do not have elephants. We are not poor, but it is policies from outside that limit us.*" he said (Bhebhe, 2016: reporting for The African Report).

6. Discussion and conclusion

The research above has demonstrated that tensions in wildlife management arise due to contrasting problem representations of the elephant crisis in the country. Analysis of the data highlights that the tensions are not over a self-evident problem but rather indicate that different policy formulations shape the crisis in particular ways. Most previous research has demonstrated that tensions over the mitigation of the elephant crisis have been about which solutions are more viable and appropriate over others. For instance, with regards to trophy hunting as a solution to socio-economic and ecological challenges, the debate has been over how effective this solution is. Semcer (2019) argues that trophy hunting may be a component of a wider wildlife management plan, aiding in population control in regions with few or no natural predators. He further asserts that this can reduce conflicts between people and wildlife, decrease overcrowding, and maintain the ecological system's general balance. On the other hand, McCarthy (2015) reasons that the alleged benefits of conservation are frequently undermined by fraud, poor management, and lack of transparency. This research, however, demonstrates that the source of the tension is not about how effective each proposed solution is, but rather about how the problem is represented in the first place. Contrasting problem representations of whether elephants are overpopulated or underpopulated seem to lead to debates of whether trophy hunting can be managed sustainably or not.

Furthermore, this research unearthed that the use of different and contrasting discourses or knowledges in the formulation of arguments is another source of tension in the management of elephants in Zimbabwe. Previous research has mainly highlighted that the very existence of elephants (whether too few or too many) is the cause of tensions in how they should be managed. For instance, Merrick and Koprowski (2017) argue that for endangered species to survive, their natural habitats must be protected and restored. To do this, it is necessary to identify important ecosystems, establish protected places like national parks or animal sanctuaries, and put precautions in place to stop habitat deterioration or destruction (Merrick and Koprowski, 2017). On the flipside, McCarthy (2015) highlight that many people have ethical reservations about the approaches used to manage wildlife overpopulation, such as hunting, culling, or fertility control. In this study, the conundrum lies in elephants being considered endangered globally whilst regarded overpopulated in a specific region. This research delved deeper to elaborate that the use of different scales or knowledge in determining the elephant situation and their management is the cause of tensions between the Zimbabwean government and conservation NGOs, not their mere presence.

To add to that, crafting arguments in elephant management, based on divergent discourses, perpetrate the tensions between the government and conservation NGOs. As an example, whilst the government uses discourse on sustainable livelihoods and economic gain to justify the strategic disposition of elephants; some conservation NGOs base their arguments on wildlife conservation discourses to oppose such solutions. This is further evidence that the tensions are not over a self-evident problem but are a product of contrasting problem representations emanating from different discourses. Unlike previous research which treated the elephant crisis as a self-evident problem, this research scrutinised the problem representations to demonstrate how they shaped the elephant crisis in Zimbabwe.
Lastly, the way the elephant crisis is represented by both the government and conservation NGOs sustain their arguments for or against the proposed solutions to it. Most previous research has argued that tensions on the mitigation of wildlife problems are mostly about which solution is more proper or viable than the other. For instance, trophy hunting has the potential to bring in a sizable sum of money through hunting licenses and fees, which can then be utilized to support conservation initiatives, anti-poaching campaigns, habitat restoration efforts, and community development initiatives in rural regions (Matsengarwodzi, 2021). On the other hand, critics contend that alternative forms of wildlife tourism, such as photographic safaris, can generate comparable or even greater economic benefits without the ethical concerns associated with trophy hunting (Susan-Nicol, 2023). This is a demonstration of how debates have been described to be over the effectiveness of a solution to a self-evident problem. This research, however, has demonstrated that tensions regarding solutions stem from the way the problem is represented in the first place. And how sustaining certain problem representations (e.g., having too many elephants and limited financial capacity to maintain the numbers) sustain arguments for monetising elephants (e.g., through trophy-hunting) as a solution. The problem is understood in a way that allows certain types of action. For example, game reserves upkeep challenges as a representation of the elephant crisis have been formulated because of the country's inability to trade in its ivory.

To conclude, it has been demonstrated that the tensions in wildlife management are not about self-existent or self-evident problems but are rather a result of contrasting problem representations by different stakeholders. Stakeholders who formulate policies and/or solutions to wildlife problems usually base their arguments on different and sometimes conflicting discourses or knowledge sets, and this usually results in tensions on which solutions should be adopted.

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Appendix 1

List of articles that were accessed online.

- https://www.aljazeera.com/features/2022/5/6/in-zimbabwe-conflict-escalates-between-elephants-and-humans#:~:text=During%20the%20dry%20season%2C%20the,and%20lives%20across%20the%20country.
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- http://www.news.cn/english/2021-11/11/c_1310304662.htm
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- https://futureforelephants.org/en/information/the-crisis-in-africa
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- https://link.springer.com/chapter/10.1007/978-3-319-22246-2_7
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- https://www.africanliberty.org/2021/05/24/is-elephant-trophy-hunting-in-zimbabwe-doing-more-harm-than-good/
- https://www.theafricareport.com/1084/zimbabwes-ivory-stockpile-conundrum/?gclid=CjwKCAjwxOymBhAFEiwAnodBLNZqYaoEqvahdpln08o-FoCDkCeYG_EljwucwJLR48zsmkADeAHXpBoC67EQAvD_BwE
- https://qz.com/africa/2005322/zimbabwe-looks-to-elephant-hunting-for-revenue-lost-during-covid
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