

**GOOD GOVERNANCE AFRICA** 

Inclusive biodiversity conservation and the unsustainability of 'sustainable use'

By Dr Ross Harvey

June 2024



# Inclusive biodiversity conservation and the unsustainability of 'sustainable use'

#### By Dr Ross Harvey

### **Executive Summary**

The South African Government's *Reviewed National Biodiversity Economy Strategy* (2024) continues to promote trophy hunting as a conservation tool. This policy briefing challenges this approach, arguing that trophy hunting, particularly of endangered species, should be removed from the national biodiversity strategy due to overstated economic benefits and high ecological costs.

Instead, the briefing suggests exploring sustainable, non-consumptive alternatives to trophy hunting. Successful pilot programmes should be expanded, integrating local communities into ecotourism and conservation-enhancing agriculture. This strategy aims to join fragmented landscapes into larger, ecologically sustainable areas, providing sustainable livelihoods while conserving biodiversity.

Moreover, the current focus on consumptive use, such as game ranching and trophy hunting, needs re-evaluation. This philosophy creates unrealistic revenue expectations and promotes fundamentally unsustainable practices. The briefing emphasises the need to prioritise ecological sustainability over consumptive use, aligning with the constitutional duty to protect the environment for future generations.

These recommendations are based on the analysis that the economic value of trophy hunting is often inflated and that the opportunity costs are significant. Non-consumptive alternatives can better support both conservation and community livelihoods, ensuring a genuinely inclusive conservation strategy.

#### Recommendations

- Trophy hunting, especially of charismatic endangered species, should be abandoned as a pillar of any national biodiversity strategy. Its purported economic advantages do not bear up under scrutiny and its ecological costs are too high.
- Build more non-consumptive and sustainable alternatives to trophy hunting that can be piloted and trialled. Where successful, these should be scaled up. This is more likely to sustain the communities that the government's strategy envisages, including those in conservation.
- Integrate local communities into ecotourism value chains through conservation-enhancing agriculture and a sustainable share of the ecological value created by joining up currently fragmented landscapes. This will help to sustainably break down the walls of fortress conservation.
- The idea of consumptive 'sustainable use' underpinning national biodiversity conservation needs to be reconsidered, as it tends to create unmatchable expectations of substantial revenue from game ranching, plant extraction, rhino horn and ivory trade, and insists on fundamentally unsustainable practices such as trophy hunting.





#### Introduction

The South African government recently released its "Reviewed National Biodiversity Economy Strategy" <sup>1</sup> for public comment. This strategy is built on an earlier (2016) edition<sup>2</sup> under the ministerial ambit of the late Edna Molewa and possesses remnants of the controversial insistence on "sustainable use" as the guiding light for how the country manages its biodiversity. For instance, Molewa closed her foreword by insisting that "we need to step up our efforts to utilise our biodiversity sustainably and economically to support livelihoods of all South Africans including present and future generations."

A significant and often overlooked debate in South Africa is whether section 24 of the Constitution, pertaining to the treatment of the natural environment, does in fact support 'sustainable use' as reflected in strategy documents such as these. A 2016 legal opinion, for instance, indicates that it is "incorrect to interpret section 24 of the Constitution as establishing a right to use wildlife sustainably. Instead, [it] imposes a duty on the State to protect the environment (including wildlife) for the benefit of present and future generations..." And, if natural resources are required for justifiable economic development, "then that use and development must be undertaken in a manner that is ecologically sustainable".3 In other words, the primary concern should be ecological sustainability rather than consumptive use justified on a blanket "sustainable use" diktat. This policy briefing highlights the shortcomings of elevating trophy hunting in the 2024 strategy and argues that to be truer to the constitution, non-consumptive alternatives should drive an Inclusive Conservation strategy instead.

#### **Trophy Hunting and its Discontents**

Currently, a global spotlight is being shone on trophy hunting as an ostensible means of biodiversity conservation. The United Kingdom is progressing a Bill through the House of Commons that would prevent the import of hunting trophies from endangered species. Some African governments have responded to this sovereign policy move, calling it "colonial". President Masisi of Botswana, for instance, offered to send 20,000 elephants to Germany, and a smaller number to London's Hyde Park, that German and British citizens respectively might learn how to live with elephants.

This public relations tactic follows a 2019 letter to the academic journal *Science*<sup>4</sup> by 'sustainable use' advocates, who suggested that trophy hunting – 'killing to conserve' – was essentially a necessary evil to prevent wild land being turned over to ecologically destructive agriculture or worse. A backlash<sup>5</sup> ensued. South Africa's 2024 strategy release has fuelled the debate; several academics who opposed the UK Bill<sup>6</sup> simultaneously support the SA strategy,<sup>7</sup> along with some local academics.<sup>8</sup>

Trophy hunting is the historically colonial practice of killing wild animals to extract their secondary sexual characteristics (such as horns and tusks) or mount their stuffed bodies for repatriated display. It is a practice of natural resource extraction by largely foreign entities, with little benefit accruing to local communities who are the purported beneficiaries. Trophy hunting during the colonial era in Africa nearly extirpated elephants, for instance, which led to the creation of what is now called *fortress conservation*. The purpose of fenced-in reserves was to manage wildlife numbers to ensure a 'sustainable' supply for trophy hunting, and to keep local community members out.

Rosaleen Duffy, 'Waging a War to Save Biodiversity: The Rise of Militarized Conservation', International Affairs 90, no. 4 (2014): 819–34, https://doi.org/10.1111/1468-2346.12142.



<sup>1</sup> Fisheries and the Environment Ministry of Forestry, 'Reviewed National Biodiversity Economy Strategy' (Pretoria, 8 March 2024), https://www.dffe.gov.za/sites/default/files/legislations/nemba\_draftbiodiversityeconomystrategy\_g50279gon4492.pdf.

<sup>2</sup> Department of Environmental Affairs, 'NATIONAL BIODIVERSITY ECONOMY STRATEGY (NBES)' (Pretoria , March 2016), https://www.dffe.gov.za/sites/default/files/reports/nationalbiodiversityeconomystrategy.pdf.

<sup>3</sup> Confidential legal opinion (2016) obtained through personal communication in 2019.

<sup>4</sup> Amy Dickman et al., 'Trophy Hunting Bans Imperil Biodiversity', Science 365, no. 6456 (2019): 874–874, https://doi.org/10.1126/science.aaz0735.and several governments have legislated against it ([ 1 ][1]

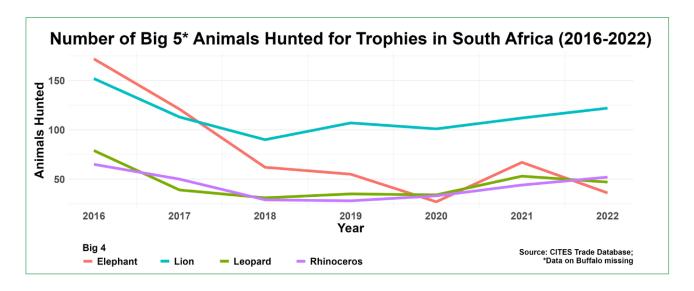
<sup>5</sup> Katarzyna Nowak et al., 'Trophy Hunting: Bans Create Opening for Change', Science 6464 (2019): 434-35, https://doi.org/10.1126/science.aaz4023; Hans Bauer et al., 'Trophy Hunting: Broaden the Debate', ed. Jennifer Sills, Science 366, no. 6464 (25 October 2019): 433-34, https://doi.org/10.1126/science.aaz4036.

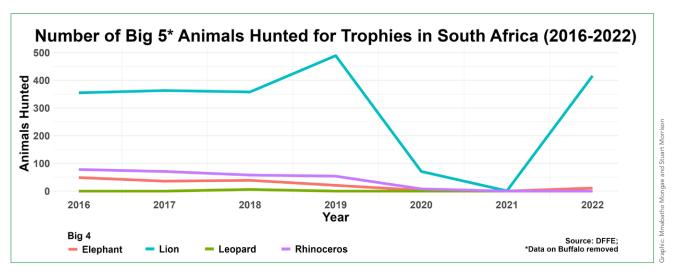
<sup>6</sup> Dilys Roe et al., 'Trophy Hunting Undermines Conservation , Right ?', 2024, https://www.africahunting.com/threads/trophy-hunting-undermines-conservation-right-wrong.81047/.

<sup>7</sup> Gail Thomson et al., 'SA Biodiversity Strategy a Key Step Away from Fortress Conservation', Daily Maverick, 24 March 2024, https://www.dailymaverick.co.za/article/2024-03-24-sa-biodiversity-strategy-a-key-step-away-from-fortress-conservation/.

<sup>8</sup> Hayley Clements, Alta De Vos, and Matthew F Child, 'South Africa's Conservation Model: Why Expanding the Use of Biodiversity to Generate Money Is a Good Idea', accessed 22 May 2024, https://theconversation.com/south-africas-conservation-model-why-expanding-the-use-of-biodiversity-to-generate-money-is-a-good-idea-226750.

<sup>9</sup> Cameron K Murray, 'The Lion's Share? On the Economic Benefits of Trophy Hunting' (Melbourne, 2017), www.ecolarge.com.





Ironically, trophy hunting is now subversively defended as an 'anti-neocolonial practice', desired by African countries, "who do not appreciate being 'dictated' to by foreign governments as to how they should manage their wildlife. The incongruent moral reasoning of 'killing to conserve' is not directly addressed in this briefing, though it is an important dimension of the debate. Crudely consequentialist' reasoning, the underlying moral philosophy underpinning rationalisations for trophy hunting, suggests that trophy hunting is the least-worst

option for conserving wild landscapes in remote areas that are unamenable to photographic tourism, as the consequences of not doing so is that the animals would suffer more harm because poaching would increase or that the land itself would be lost to other economic activities. This entails at least two false dichotomies. The first is that without trophy hunting, poaching would increase. The second is that the land must *either* be used for trophy hunting or an ecologically destructive activity. But the decline of the trophy hunting industry over the last decade

<sup>13</sup> Guillaume Chapron and José Vicente López-Bao, 'Trophy Hunting: Role of Consequentialism', Science (New York, N.Y.) 366, no. 6464 (25 October 2019): 432, https://doi.org/10.1126/science.



<sup>11</sup> Sian Sullivan, "Hunting Africa": How International Trophy Hunting May Constitute Neocolonial Green Extractivism', Journal of Political Ecology 30, no. Special Issue (2023): 1–31; Ross Harvey, 'Trophy Hunting Propaganda Is One More Form of Greenwashing', The Revelator, July 2023, https://therevelator.org/trophy-hunting-greenwashing/.

<sup>12</sup> Unsophisticated forms of consequentialist moral reasoning consider the likely consequences of an action, and what society might look like if everyone took such an action. One works backwards from there to determine whether the action is right or wrong. The problem is that humans are typically poor at calculating the future and what consequences might actually transpire. It also pays insufficient attention to the inherent moral value of an action. For instance, one might reasonably achieve a desired outcome, but the means by which that end is attained might still be morally unacceptable. Consequentialism cannot easily address these difficulties.



demonstrates that it cannot generate sufficient value to sustain itself, let alone conservation.14 As the graphs above indicate, the number of "big-five" animals being trophyhunted in South Africa has been declining (excluding buffalos) since 2016 (and before). However, the graphs also reveal a discrepancy between the DFFE's own data (supplied by the Professional Hunting Association of South Africa) and the CITES data. From a governance perspective, this is a problem as the numbers should reconcile. The most obvious discrepancy is with lions. A plausible explanation is that the DFFE's figures include canned hunting of captive-bred lion, which continues despite international and domestic objection to the practice, whereas the CITES data only reflects wild lions hunted. Given the government's strategy to specifically increase Big 5 hunting, the data raises the question of where all the animals required for shooting will come from, a question we address below.

This briefing raises a two-fold objection to trophy hunting as a conservation tool for South Africa, from which alternative policy recommendations follow. First, it makes the case that the purported economic value of the practice is typically overstated while the costs are overlooked or minimised. Second, the opportunity costs associated with trophy hunting call for more innovative solutions which need to be developed if inclusive conservation is to be achieved.

#### **Economic value of trophy hunting**

Goal 2 of the South African government's 2024 strategy is: "Consumptive use of Game from extensive wildlife systems at scale that drives transformation and expanded sustainable conservation compatible land-use." The expected impact is to increase the "GDP contribution of consumptive use... from R4.6 billion (2020) to R27.6 billion by 2036." There are three envisaged actions within this goal, foremost of which is to "increase the number of Big five (sic) animals available for fair-chase trophy

hunting, especially in community owned areas and larger contiguous privately owned land."<sup>16</sup>

Putting aside the question of whether trophy hunting ever occurs under conditions of 'fair chase'<sup>17</sup>, the ambition to increase big-five (lion, leopard, elephant, buffalo and rhino) trophy availability is premised on economic grounds. It is unclear where the figure of R4.6 billion comes from. Clements and her co-authors cite a figure of US\$250 million per year<sup>18</sup> from an academic paper by Saayman and others.<sup>19</sup> In current Rand/US\$ exchange terms, the figures cohere, so one must assume that this is the source of the government's figure.

This same Saayman et al paper is cited in a 2020 High-Level Panel report, justifying the trophy hunting of endangered species.<sup>20</sup> The figure is derived from a survey of trophy hunters that was posted on the websites of Safari Club International (SCI) and the Professional Hunters Association of South Africa (PHASA). It is methodologically challenged, as "respondents - if verifiable hunters - have a vested interest in the continuation of the trophy hunting industry and might therefore be biased towards overreporting the value of their activity."21 The authors do not indicate how they established the credibility of the data, or how they compensated for the fact that only 362 respondents completed the survey following the 2015/16 hunting season (out of a target population of 7,600). They further assume that the expenditure patterns of the 362 respondents can be applied uniformly across the target population figure of 7,600. The authors state that, including multiplier effects from hunting expenditure: "trophy hunting annually contributes US\$341 million to the South African economy and that it supports more than 17,000 employment opportunities."22

Beyond the data credibility question, Dr Adam Cruise notes that "there is no clear explanation [in the 2024 strategy] of how the trophy hunting industry will grow from a value

Saayman, van der Merwe, and Saayman, 'The Economic Impact of Trophy Hunting in the South African Wildlife Industry'.



<sup>14</sup> Bertrand Chardonnet, 'Africa Is Changing: Should Its Protected Areas Evolve? Reconfiguring the Protected Areas in Africa', IUCN, 2019.in order to help conserve species, as well as their functions and their natural balances. Today, it is of vital importance to have an adequate budget for managing a protected area: this is currently estimated at 7 to 8 US Dollars/hectare per year (in Africa

<sup>15</sup> Ministry of Forestry, 'Reviewed National Biodiversity Economy Strategy', 14.

<sup>16</sup> Ibi

<sup>17</sup> A 375 or 458 or 470 high-powered rifle is no match for an elephant, so the idea of a 'chase', no matter how vast the landscape, seems to be a misnomer. And as for fairness, it's not clear that in this asymmetry there can be such a thing.

<sup>18</sup> Clements, De Vos, and Child, 'South Africa's Conservation Model: Why Expanding the Use of Biodiversity to Generate Money Is a Good Idea'.

Melville Saayman, Petrus van der Merwe, and Andrea Saayman, 'The Economic Impact of Trophy Hunting in the South African Wildlife Industry', Global Ecology and Conservation 16, no. e00510 (2018): 1–8, https://doi.org/10.1016/j.gecco.2018.e00510.

<sup>20</sup> The High-Level Panel of Experts for the Review of Policies, Legislation and Practices on Matters of Elephant, Lion, Leopard and Rhinoceros Management, 'High-Level Panel Report - For Submission to the Minister of Environment, Forestry and Fisheries', 2020, https://www.environment.gov.za/sites/default/files/reports/2020-12-22\_high-levelpanel\_report.pdf.

<sup>21</sup> Ross Harvey, 'Trophy Hunting in South Africa: Is It Worth It? An Evaluation of South Africa's Policy Decision to Elevate Trophy Hunting as a Key Conservation Tool' (Johannesburg, 2022), https://digitalmallblobstorage.blob.core.windows.net/wp-content/2022/03/Trophy-Hunting-Working-paper.pdf.



of R4.6 billion to R27.6 billion by 2036."<sup>23</sup> According to the Department of Environmental Affair's own professional hunting statistics, 6,000 hunters shot 36,500 wild animals in 2022. Cruise calculates that, by 2036:

"More than 16,500 international hunters will be required to shoot almost 100,000 animals annually. Therefore, a total of close to one million animals will have to be trophy hunted during this period... It does not appear plausible that these increased numbers of animals will suddenly materialise in "extensive wildlife systems", nor that the international demand for these exists."<sup>24</sup>

Globally, the trophy hunting industry is in decline. "In the USA, the main country of origin [of hunters hunting in Africa], the number of hunters dropped from 14.1 million in 1991 to 11.5 million in 2016" a decrease of 18.5%.<sup>25</sup> Its revival also seems unlikely in a world asking questions about the ethics of shooting elephants, for instance.<sup>26</sup> The number of foreign hunters visiting South Africa has declined by 62.4% in 14 years, from 16,594 in 2008 to 6,242 in 2022 (a post-Covid recovery figure).

Even if conservation real estate were to increase from 20 million hectares to 34 million by 2040 (as envisaged in

<sup>26</sup> Chelsea Batavia et al., 'The Elephant (Head) in the Room: A Critical Look at Trophy Hunting', Conservation Letters 12, no. 1 (2019), https://doi.org/10.1111/conl.12565; Chelsea Batavia et al., 'Trophy Hunting: Values Inform Policy', ed. Jennifer Sills, Science 366, no. 6464 (25 October 2019): 433, https://doi.org/10.1126/science.aaz4023.



<sup>23</sup> Adam Cruise, 'New National Biodiversity Economy Strategy Is Only Good in Parts', Daily Maverick, 2024, https://www.dailymaverick.co.za/opinionista/2024-04-21-new-national-biodiversity-economy-strategy-is-a-curates-egg-only-good-in-parts/.

<sup>24</sup> Ibi

<sup>25</sup> Chardonnet, 'Africa Is Changing: Should Its Protected Areas Evolve? Reconfiguring the Protected Areas in Africa', 35.in order to help conserve species, as well as their functions and their natural balances. Today, it is of vital importance to have an adequate budget for managing a protected area: this is currently estimated at 7 to 8 US Dollars/hectare per year (in Africa





the strategy), it is unclear that it could support the kind of increased numbers required to realise the strategy's ambition. Moreover, as Bertrand Chardonnet<sup>27</sup> has shown, trophy hunting increasingly cannot pay the amounts required to sustain the ecosystems that would support potentially sustainable hunting.

## **Opportunity Costs**

Opportunity costs refer to benefits that are foregone when any given economic activity is chosen instead of another. The common narrative is that conservation has flourished in South Africa because of private game ownership. This assumption remains untested, however. In the very simplest formulation, it does not consider that the land currently allocated to ranching and hunting may otherwise have been joined up to reduce the ecological costs of fragmentation and allow migratory corridors to be established, which would likely be conservationenhancing.<sup>28</sup> Joined-up landscapes may generate larger revenues than trophy hunting through increasing ecotourism options and ensuring that ecological integrity (the ultimate bedrock of tourism and, ironically, sustainable trophy quality) is created and maintained where it may currently be absent.29

The 2024 strategy also fails to account for the direct harm caused to apex predator populations (such as leopards), who are often shot by private game ranchers breeding herbivores. This is a devastating opportunity cost associated with the proliferation of game ranching.<sup>30</sup>

Finally, given that trophy hunting is increasingly incompatible with ethically-minded ecotourism, it is worth considering that Saayman et al's figure of US\$341 million – as a proportion of total tourism expenditure in 2019 (US\$17.9billion) – trophy hunting represents about 1.9% of the total tourism value to the country. The 17,000 "employment opportunities" claimed in the study represent a miniscule proportion of the 1.46 million jobs generated through tourism in 2019. Chardonnet reports that total turnover from hunting in Botswana (prior to its 2014 moratorium) was only 20 million US\$/year. By 2017 (a useful marker year because of the natural experiment of having banned trophy hunting from 2014 to 2018), "Botswana generated a turnover of 687 million USD from tourism for 26,000 direct jobs." "31

Four key policy recommendations follow from the above arguments. First, trophy hunting should be abandoned

<sup>11</sup> Chardonnet, 'Africa Is Changing: Should Its Protected Areas Evolve? Reconfiguring the Protected Areas in Africa', 38.in order to help conserve species, as well as their functions and their natural balances. Today, it is of vital importance to have an adequate budget for managing a protected area: this is currently estimated at 7 to 8 US Dollars/hectare per year (in Africa



<sup>27 &#</sup>x27;Africa Is Changing: Should Its Protected Areas Evolve? Reconfiguring the Protected Areas in Africa' in order to help conserve species, as well as their functions and their natural balances. Today, it is of vital importance to have an adequate budget for managing a protected area: this is currently estimated at 7 to 8 US Dollars/hectare per year (in Africa

<sup>28</sup> I Douglas-Hamilton, T Krink, and F Vollrath, 'Movements and Corridors of African Elephants in Relation to Protected Areas', Naturwissenschaften 92, no. 4 (2005): 158–63, https://doi.org/10.1007/s00114-004-0606-9; Craig R. Jackson et al., 'Evaluating Habitat Connectivity Methodologies: A Case Study with Endangered African Wild Dogs in South Africa', Landscape Ecology 31, no. 7 (2016): 1433–47, https://doi.org/10.1007/s10980-016-0342-5; Claudia Pittiglio et al., 'Identifying Transit Corridors for Elephant Using a Long Time-Series', International Journal of Applied Earth Observation and Geoinformation 14, no. 1 (2012): 61–72, https://doi.org/10.1016/j.jag.2011.08.006.

<sup>29</sup> Harvey, 'Trophy Hunting in South Africa: Is It Worth It? An Evaluation of South Africa's Policy Decision to Elevate Trophy Hunting as a Key Conservation Tool.'

<sup>30</sup> Ross T Pitman et al., 'The Conservation Costs of Game Ranching', Conservation Letters 10, no. 4 (2017): 402–12, https://doi.org/10.1111/conl.12276.



as a key pillar of any national biodiversity strategy. Its purported economic advantages do not bear up under scrutiny. Second, more non-consumptive and sustainable alternatives to trophy hunting need to be built that can be piloted and trialled. Where successful, these should be scaled up. This is more likely to sustain the communities that the government's strategy envisages, including in conservation. Third, conservation policies need to integrate local communities into ecotourism value chains through conservation-enhancing agriculture and a sustainable share of the ecological value created by joining up currently

fragmented landscapes. This will help to sustainably break down the walls of fortress conservation. Many of these have been outlined in the literature<sup>32</sup> and work from South Africa itself shows the extensive employment opportunities in non-consumptive, biodiversity-related tourism.<sup>33</sup> Finally, the idea of consumptive 'sustainable use' underpinning a national biodiversity strategy needs to be reconsidered, as it tends to lead to unsustainable practical options such as trophy hunting and the stimulation of a domestic rhino horn trade (which this briefing did not consider but is similarly untenable).<sup>34</sup>

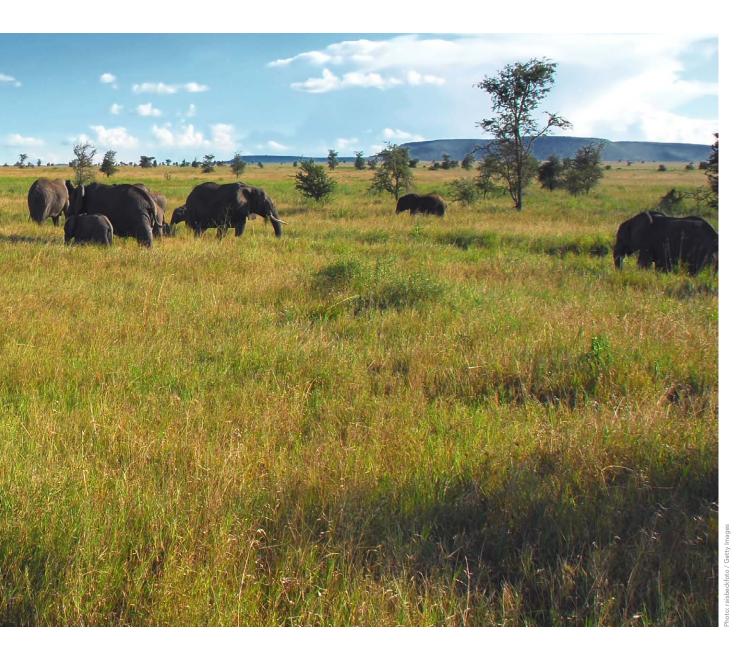


<sup>32</sup> Nowak et al., 'Trophy Hunting: Bans Create Opening for Change'.

<sup>33</sup> Amanda Driver, Fulufhelo Mukhadi, and Emily A Botts, 'AN INITIAL ASSESSMENT OF BIODIVERSITY-RELATED EMPLOYMENT IN SOUTH AFRICA' (Cape Town, 2019), http://www.dpru.uct.ac.za/sites/default/files/image\_tool/images/36/Publications/Working\_Papers/DPRU WP201902.pdf.

<sup>34</sup> Cruise, 'New National Biodiversity Economy Strategy Is Only Good in Parts'.





#### Conclusion

Trophy hunting as a biodiversity conservation strategy is questionable on economic and ecological grounds. Even if these grounds held, the governance conditions would have to be near-perfect to render the practice sustainable. The current state of administrative decline in provincial wildlife authorities suggests that good governance is largely absent. Therefore, trophy hunting should be abandoned as part of our national biodiversity strategy. However, alternatives do have to be piloted, especially those that are likely to generate benefits for local communities who will

be integral to creating contiguous, joined-up landscapes that are critical to the strategy's success. <sup>36</sup> Finally, the state should seriously reconsider the overarching philosophy of consumptive biodiversity use that animates conservation strategies in South Africa to ensure that ecological sustainability guides all decision-making processes in the country. In the final analysis, no economic growth is possible without intact ecology. <sup>37</sup>

<sup>37</sup> Robert Goodland and Herman E. Daly, 'Environmental Sustainability: Universal and Non-Negotiable', Ecological Applications 6, no. 4 (1996): 1002–17, https://doi.org/10.2753/IJS0020-7659400204.



<sup>35</sup> Tamanna Patel et al., 'The State of Provincial Reserves in South Africa: Challenges and Recommendations', 2023, https://ewt.org.za/resources/cpsu-programme/.

<sup>36</sup> Romy Chevallier and Ross Harvey, 'Ensuring Elephant Survival through Community Benefit' (Johannesburg, 2016), http://www.saiia.org.za/occasional-papers/1106-ensuring-elephant-survival-through-improving-community-benefits/file.



For more information on this policy briefing, contact our Good Governance Africa advisory services team.

## Contact us

**Tel:** 011 268 0479 **Email:** info@gga.org

Web: www.gga.org



