



Participatory study of policy process for wildlife conservation and ecotourism in Eswatini: A multiple streams analysis

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ABSTRACT

By the 1950s, overhunting in the African Kingdom of Eswatini drove most of its wildlife to extinction. In 2022, Eswatini has one of the most robust conservation success stories in all of Southern Africa and yet has received minimal scholarly attention. Using the Multiple Streams Framework, to understand a complex system, we analyze 40 interviews and 34 policy documents to study variation in problems, policy, and politics across four different types of conservation areas: Community Based Wildlife Protected Areas, a Royal National Park, a Parastatal National Park, and a Privately Managed Protected Area. Our research is participatory, meaning Eswatini conservation professionals played a role in shaping research design and questions and collecting data. We found that policy solutions common to all institutions include 1) the absolute decision-making power of the king, 2) the stringent wildlife protection law in the 1953 Game Act, and 3) a surprisingly conducive space for communities to enact community-based conservation amidst an authoritarian monarchy. The most important problems include economic challenges (e.g. poverty) and climate change. Politics play a role, with unprecedented, violent pro-democracy protests in the summer of 2021 with activists calling for increased human rights considerations, a problem that spills into the wildlife conservation sector. Findings can be used by policy-makers seeking to replicate conservation successes elsewhere, or to enact reforms in the Eswatini system to enable its proven system of wildlife conservation to adapt and endure.

1. Introduction

The nation of Eswatini (until 2018 known as “Swaziland”) is one of the few places on earth where rhinoceros sightings are possible in the wild, but little is understood about how wildlife conservation is enacted. Regionally, Sub-Saharan Africa’s safari industry is worth \$12.4 billion in annual revenue, drawing people from all over the world who travel to view the five most iconic wildlife species known as the “Big 5” (lion, leopard, rhino, elephant, and African buffalo) (Mitchell, 2021). Eswatini, Africa’s only remaining absolute monarchy, positions wildlife as nearly synonymous with the nation, calling the king Ngwenyama or “the lion” and his mother Indlovukati or the “Great She-Elephant.” Eswatini’s tourism industry made \$14.3 million dollars in 2019, and, per capita, it welcomed more tourists than any other country in Southern Africa, with wildlife and cultural experiences a major draw (World Data.info, 2019). Eswatini has high poverty levels, with 58.9% living below the poverty

line as of 2017, with one third of Eswatini’s people living on less than \$1.90 U.S. per day (World Bank, 2022). Therefore, wildlife tourism is a significant income generating activity.

Beginning in 1970, poaching (or the illegal hunting and harvest of wildlife) threatened to eliminate one of the most charismatic Big 5 species, the rhinoceros. Both the black (*Diceros bicornis*) and white (*Ceratotherium simum*) rhinoceros are found in Eswatini. In neighboring South Africa, home to the most well known wildlife viewing park in Sub-Saharan Africa, Kruger National Park, the rhinoceros population declined from 10,000 individuals in 2010 to around 4000 in 2021. Meanwhile, Eswatini has lost only three rhinoceros to poaching since 1991 (Maron, 2021). This suggests that wildlife management in Eswatini is a regional conservation success story, yet the wildlife management system in Eswatini has been the subject of minimal scholarly inquiry.

Our research is the first deep dive into wildlife conservation policy-making in Eswatini, a country not traditionally viewed as a conservation

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hegemon, with other nations receiving significantly more attention. Our descriptive, exploratory case study is the first to characterize how wildlife conservation happens in Eswatini. To do this we focus on wildlife conservation policy, asking how policy processes vary and using four different types of systems for wildlife conservation as cases: Privately Managed Protected Areas, Community Based Wildlife Protected Areas, and national parks administered by both non-governmental organizations (NGOs) and the government of Eswatini. To parse out the different systems for wildlife conservation as units of analysis for comparison, we use the idea of common pool resource institutions, defined as the set of working rules and social arrangements that determine who can make decisions, what actions on wildlife and natural resources are permitted and limited, what information must be gathered to make decisions, and what payoffs result (Ostrom, 1990). Our study conceptualizes the different systems of wildlife management as *institutions*, or bounded areas with rules about the harvest and viewing of wildlife populations, sanctions to enforce the rules, decision-making processes to make and change the rules, and interactions with government and the private sector (Ostrom, 1990). Our research uses a lens of Multiple Streams theory, a type of policy process theory, to describe how wildlife management problems, policies, and politics vary across these four institutions.

Our findings show important commonalities and variation across wildlife management institutions allowing us to characterize the overall system of wildlife conservation in Eswatini. We found that the most important problems include poaching, economic challenges (e.g. poverty, Covid-19, and funding for wildlife management), political challenges, and a changing climate; all problems that lead wildlife management institutions to make policy to counteract them. Policy ideas common to all institutions include 1) a prominent role for the royal family, 2) robust protections offered by one of the continent's most stringent wildlife protection laws, the 1953 Game Act, and 3) a surprisingly conducive space for communities to enact community-based conservation amidst an authoritarian monarchy political system. Policy varies substantially within individual wildlife protected areas (institutions) all with differing decision-making processes, conservation plans, enforcement of rules, and domestic and international partnerships. This system is set against a political backdrop that saw unprecedented, violent, pro-democracy protests in the summer of 2021 with activists calling for increased human rights considerations, a problem that our findings show spill into the wildlife conservation sector.

Findings can be used by policy-makers, NGOs, and multilateral donors seeking to replicate conservation successes in other Sub-Saharan African countries, or enact reforms in the Eswatini system to enable its proven system of wildlife conservation to adapt and endure.

2. Theoretical framework

To characterize conservation policy in Eswatini, we apply John Kingdon's Multiple Streams Framework (Kingdon, 2013). Kingdon argues that three streams make up the policy process: the *problem stream*, *policy stream*, and *politics stream*. The problem stream includes the issues that stakeholders and policy makers want addressed. Political institutions, or the existing organizations, laws, government agencies, and networks are important for defining problem issues in the problem stream (Koebele, 2021; Reardon, 2018; Zohlnhöfer et al., 2016). For our case studies, the problem stream begins with the tradeoffs inherent to conservation of natural resources, biodiversity, and related livelihoods in Eswatini.

The policy stream is the "soup of ideas" from which possible policy options are selected (Kingdon, 2013). These options for Eswatini are constrained by the country's system of authoritarian governance. Theories of institutional change provide insight in the policy stream allowing three tiers of policy change to be categorized. These include normal policy-making (e.g. routine decision-making within existing policies), which can be differentiated from the introduction to new

policies, which can also be differentiated from major paradigmatic policy change transforming assumptions underlying policy (Streeck and Thelen, 2005). Typically, the third type of transformational policy change requires an external shock event destabilizing institutions (Young, 2010; Niedziałkowski and Putkowska-Smoter, 2020).

The politics stream consists of a population's "national mood." This is influenced by factors from pressure from interest groups to party politics, and anything that makes a population notice an issue. In Eswatini, the national mood is largely influenced by the will of the king, who limits freedom of the press and has banned political parties. Notably, beginning in May of 2021 and continuing to the present, Eswatini has been experiencing pro-democracy protests that became violent when police used force to dispel protestors in the summer of 2021 (AfricaNews, 2021; Al Jazeera, 2021). In stark contrast with large portions of the country who live in poverty, the king of Eswatini is very wealthy, and his handling of the protests by permitting police violence, arresting pro-democracy activists and politicians, and dismissal of the pro-democracy group's reform ideas inflamed the protests (Mbuyisa, 2022). Our research is the first study on conservation conducted during and after these protests, which may change the policy system in all sectors of Eswatini's public life.

Previously, the Multiple Streams Framework was used by Kingdon to explain agenda setting in health, transportation, monetary policy at the federal level in the U.S (Herweg et al., 2015, 2017). This has since expanded to 22 policy domains, demonstrating the established nature and usefulness of the framework (Jones et al., 2016). This manuscript applies Multiple Streams Framework to decision-making rather than agenda setting, building on Zahariadis (2007), who argued that the Multiple Streams Framework can provide insights to both (see also Herweg et al., 2015). The difference between decision-making and agenda setting is that agenda setting is a process with a large number of actors competing for attention on various proposals, where decision-making is about obtaining a majority for a proposal (Herweg et al., 2017; Knill & Tosun, 2020). The number of actors decreases during decision-making, and the relevance of institutions increases.

The Multiple Streams Framework is an essential tool for analyzing a complex policy system like wildlife conservation, with its primary strength in its ability to simplify a complex system into three intuitive components to enhance understanding when it is limited. Policy process scholars note the framework's power to increase understanding of a complex system through its focus on problems, policies, and politics (Howlett, 2019). The Multiple Streams Framework has an analytical focus on how different actors work to implement their own differing solutions to policy concerns (Howlett, 2019). Given so little has been studied about Eswatini's wildlife policy, compared to nearby countries like South Africa, this framework allows us to provide an initial yet comprehensive account of the complicated wildlife policy system.

Our unit of analysis are the institutions for wildlife conservation in Eswatini, which include the bounded areas with different rules and decision-making patterns for resource uses including: Privately Managed Protected Areas, Community Based Wildlife Protected Areas, and national parks administered by both non-governmental organizations (NGOs) and the government of Eswatini. We used institutional thinking to develop criteria to differentiate our case sites (protected areas) comparing problems, policy, and politics therein. Fligstein and McAdam (2012) add detail to the Ostrom (1990) definition of institutions describing them as sets of patterned interactions of actors within fields, often in the form of regulatory entities. Within these regulatory entities with varying rules, we analyze the components of the Multiple Streams Framework (problems, policies, politics). The Multiple Streams Framework is essential for our analysis, as it depicts policy-making as a complex, contingent process in which institutions present opportunities or venues for actors to advance their preferred issues and solutions (Howlett, 2019).

The contribution of our research builds on the use of the Multiple Streams Framework for decision-making, shedding light on a context

with limited attention in the literature: the authoritarian context under an absolute monarchy. In this setting, it is not the majority that makes a decision (Herweg et al., 2017; Knill & Tosun, 2020), but rather an individual that holds large amounts of power.

While Kingdon developed the Multiple Streams Framework for the United States settings, other scholars have used the framework to examine policy processes in more diverse settings (Béland and Howlett, 2016). For our Eswatini case, scholarship shows that Multiple Streams Framework can function for countries whose governance systems, political realities, and wealth differ from Multiple Streams Framework's original context. In the African context, it was found to successfully explain health policy implementation failure at the local level in Burkina-Faso (Ridde, 2009), tobacco control policies in Mauritius (Kusi-Ampofo et al., 2015), health policy adoption and process in Kenya, Ghana, Tanzania, Malawi, and South Africa (Kumwenda et al., 2021; Kusi-Ampofo et al., 2015; Mauti et al., 2019), and the challenges of renewable energy adoption across Africa more broadly (Adams and Asante, 2019). In a more strictly political context, the Multiple Streams Framework has been used to examine agenda setting and decision making in South Africa (Mainza, 2017). What makes our manuscript unique is its application of the Multiple Streams Framework to African conservation.

3. Case study sites

Our research takes place in Eswatini (Fig. 1), a small country of 17,364 square kilometers located within South Africa. Eswatini is an ideal place to study wildlife management policy because of its impressive biodiversity, where 14 phyla have been recorded, including 766 species of vertebrates (Mongabay.com, 2010).

For our units of analysis, we compare four institutions for wildlife management, sorted by their varying rules and patterns of interactions of actors within regulatory entities. Specifically, we focus on regulatory entities of protected areas, or bounded locations where hunting and access to wildlife is regulated by laws, conservation plans, and ensured through surveillance and enforcement of rules by game wardens and managers. Using key informant information collected in March of 2020, we selected four different types of institutions for wildlife conservation in Eswatini depicted in Fig. 1.

3.1. Community based wildlife protected area

For the Community Based Wildlife Protected Area, we chose Shewula Mountain Camp as it is Eswatini's first Community Based Wildlife

Protected Area and ecotourism operation (Shewula Mountain Camp, 2004). Opened in 2000, it is set on 2650 ha of land in northeast Eswatini. The late Chief Mbandzamani II founded the protected area with assistance from the nearby reserves of Mbuluzi and Mlawula (the Privately Managed Protected Area and Parastatal National Park in this study). Located in the Lubombo Mountains, ecotourism is the main focus of the camp in addition to a forestry program for native plants and a sustainable water harvest program. At present, the area is relatively devoid of large mammals that would drive ecotourism, partially due to competition with cattle for forage, as well as potential illegal harvest of larger wildlife species.

3.2. Privately managed protected area

Mbuluzi Game Reserve is a 3,000-hectare collection of private properties turned into a wildlife protected area in northeast Eswatini (Mbuluzi Game Reserve, 2022). It lies just north of Mlawula Nature Reserve (the Parastatal National Park in this study), Shewula Mountain Camp, and Hlane Royal National Park (the Royal National Park in this study). It is managed via joint decision-making through landowning shareholders and a board of directors. Mbuluzi Game Reserve boasts substantial numbers of large mammals. Some species present in the area include, but are not limited to: giraffe (*Giraffa camelopardalis*), impala (*Aepyceros melampus*), greater kudu (*Tragelaphus strepsiceros*), nyala (*Tragelaphus angasii*), bushbuck (*Tragelaphus scriptus*), zebra (*Equus quagga*), blue wildebeest (*Connochaetes taurinus*), warthog (*Phacochoerus africanus*), and bushpig (*Potamochoerus larvatus*). Spotted hyenas (*Crocuta crocuta*) and hippopotamus (*Hippopotamus amphibius*) are occasionally seen on the property.

3.3. Royal National Park

Hlane Royal National Park was created from the king's traditional hunting grounds by King Sobhuza II in 1967 (Big Game Parks, 2021a, 2021b). It is Eswatini's largest protected area with 22,000 ha of lowveld¹ and foothills of the Lebombo Mountains. Still a property of the king, it is managed by an organization called Big Game Parks through delegation by the king. Its flagship species are African elephants (*Loxodonta africana*), black and white rhinos, lions (*Panthera leo*), hippos, and giraffes. Lions, elephants, and white rhinos are kept in a separate area of the park within lion-proof fencing to prevent human-wildlife conflict. Big Game Parks also chooses to keep its lion pride small to further reduce conflict. Hlane Royal National Park also has all the species that are present in Mbuluzi Game Reserve. Leopards (*Panthera pardus*) are occasionally documented in the park.

3.4. Parastatal National Park

Mlawula Nature Reserve is in northeast Eswatini, nestled between Hlane Royal National Park to the west, Shewula Nature Reserve to the northeast, and Mbuluzi Game Reserve to the direct north (Eswatini National Trust Commission n.d.). While it is a distinct reserve, its borders connect with the Privately Managed Protected Area (Mbuluzi), and the Royal National Park (Hlane). The reserve is managed by the Eswatini National Trust Commission (ENTC), a parastatal organization established in 1972 by the National Trust Commission Act (Eswatini National Trust Commission, 2021a). Mlawula was originally divided into cattle ranches in 1914. In 1978, one of these ranches was donated to the National Trust for conservation. The National Trust purchased adjacent lands creating the Mlawula Nature Reserve as it stands today. Mlawula Nature Reserve has a large mammalian community that is similar to that found in Mbuluzi Game Reserve, with leopards occasionally

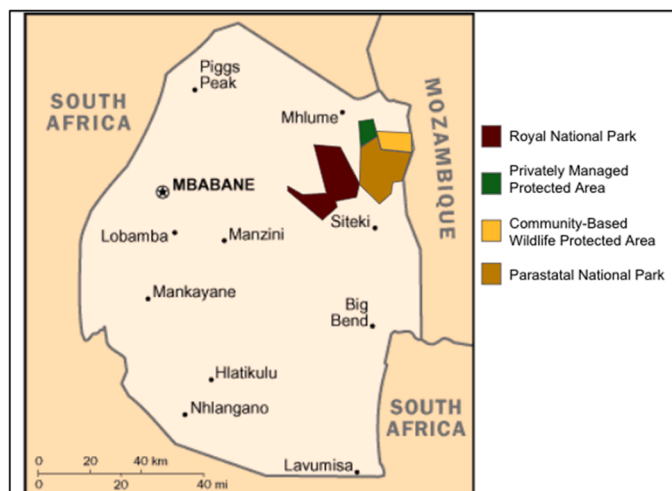


Fig. 1. Protected area case sites, public domain map created from Wikimedia Commons.

¹ Lowveld is defined as the areas between 500 and 2000 feet above sea level, and it essentially refers to the low elevation areas.

documented in the park.

3.5. Political background on case study sites

Eswatini is separated into traditional indigenous tribal jurisdictions known as *Tinkhundlas*, where each *Tinkhundla* has several chiefdoms within it, and these chiefdoms are ruled by chiefs who oversee the land, including managing disputes, land use, and enforcing Kingdom rules (Simelane, 2018). Within each chiefdom are different villages and communities, from which important leaders like the Headman, the Inner Council, and the Community Police are selected. The Headman assists the chief and is the chair of both the Council and the Police. The Inner Council is composed of important individuals from the communities, and its role is community development and traditional law enforcement.

The *Tinkhundla* system allows for a unique administration of conservation, with a ministry set up to ensure the sustainability of local customs called the Ministry of *Tinkhundla*. The ministry has been adding community based natural resource management into its chiefdom development plans (Convention on Biological Diversity, 2021). The first of these types of development projects in Eswatini is the Community Based Wildlife Protected Area studied here.

4. Methods

This project utilizes a comparative case study design as described by Yin (2017) as comparison of similar examples of a phenomenon compared along theoretical variables of interest. Data included policy documents and interviews with key managers and stakeholders. We collected a total of $n = 34$ policy documents, including laws, policies, conservation plans, and statements of policymakers, NGOs, and private sector actors enacting wildlife conservation policy. Documents were collected from case sites themselves (e.g. asking for a copy of a conservation plan) as well as from the Convention on International Trade in Endangered Species (CITES) Country Profile database, which gave us a starting point for which documents needed to be reviewed, a list which was refined during fieldwork (CITES, 2018). We also reviewed the Convention on Biological Diversity's (CBD) *Aichi Biodiversity Target 11 Country Dossier for Eswatini* (2023), using Google search to get primary sources of important policies, laws, and plans mentioned by CITES and the CBD Dossier.

We reached information saturation at 40 decision-makers and managers of wildlife in Eswatini as interview respondents. We defined decision-makers as prominent governmental employees (both elected and civil service), NGO employees, or private sector employees working in an agency or organization with statutory authority or significant relationships to agencies/organizations with statutory authority tasked with managing wildlife.

In qualitative research, expectations can be used instead of hypotheses. We expected four different types of wildlife management institutions to show variation for concepts, drawn from our theoretical framework, of problems, policy, and politics, with variation significant to explain how wildlife conservation policy is enacted in Eswatini. Our aims and objectives were to conduct interviews as well as to collect and analyze documents in one of each of the four different types of wildlife management institutions present in Eswatini (a Community Based Wildlife Protected Area, a Privately Managed Protected Area, a Royal National Park, and a Parastatal National Park) to determine whether problems, policies, and politics varied in each type of case site. These aims allow us to better characterize the overall system of wildlife management as a complex system that includes all case site types and possible variations in multiple streams of the policy process.

Our sampling logic for respondents and policy documents was purposeful sampling that selects information-rich data related to a phenomenon of interest (Palinkas et al., 2015; Creswell and Clark, 2017). We determined when we had collected enough policy documents and conducted enough interviews when information saturation was reached

(Miles and Huberman, 1994). New concepts in statements stopped adding to the overall story at $n = 40$ interviews. Table 1 below shows the breakdown of respondents.

Fieldwork took place in June of 2021 working collaboratively with an Eswatini NGO, All Out Africa, with locally-held expertise in conservation and community development, to 1) design the research at the initial funding proposal stage ensuring suitable funding for Eswatini partners to meaningfully collaborate, 2) collaboratively write the interview document, 3) collaboratively administer interviews during fieldwork, and 4) to discuss and write up results. This participatory research prioritized local issues and ensured cultural suitability. Respondents were defined and identified according to our criteria, approached with free, prior, informed consent documents, and interviewed at the protected area offices. Interviews were conducted 75% in English and 25% in siSwati using social distancing and risk mitigation procedures due to Covid-19. Interviews were transcribed in real time during interviewing and anonymized due to the risks presented by a lack of free speech in the country. Proportions of respondents are unequal because we stopped conducting interviews in field sites when interviews become repetitive, no new information was revealed. All research was conducted under ethics procedures in our university. Questions appear in the Appendix.

Using the theoretical concepts of problems, policy, and politics, we coded data in instances where managers referenced each concept to describe management. Coding took place in two cycles. In cycle one, we looked for the components of the Multiple Streams Framework, specifically problems, policy, and politics (Strauss and Corbin, 1997) (see Table 2). We used in vivo grounded theory coding followed by a second round of coding to consolidate meaning (Saldaña, 2021). Analysis was a multi-coder effort where three coders conducted the analysis between March and June 2022, checking 25% of codes at random to ensure agreement between the previous coder. Some statements from respondents received multiple codes, with their data and meaning introduced in a way to logically build meaning and understanding of Eswatini's wildlife conservation practices.

In the Findings section, we begin with an overview of the policy stream to describe how wildlife conservation is enacted in Eswatini and provide necessary context for introducing the main problems and political issues facing Eswatini decision-makers, communities, and wildlife populations.

5. Findings

Our research found variation and commonalities across our four case sites within the three streams. These commonalities and variations are specified in Table 3 below. For each of the four management institutional types (across the columns of the table) the most important themes from interviews are visible in the rows of the table. The table also shows where there is variability between the four management institutions (e.g. protected areas see substantial variation in decision-making arrangements, conservation planning, and enforcement). For Tables 3–4 we will go into greater detail in the remainder of Section 5.

5.1. Policy stream

Whilst the Multiple Streams Framework typically orders the three concepts of interest as problems, policies, politics, in this paper, we

Table 1
Breakdown of respondents.

Institution for wildlife management	Number of respondents (total $n=40$)
Community Based Wildlife Protected Area	18
Privately Managed Protected Area	10
Royal National Park	4
Parastatal National Park	9

Table 2
Codebook for the Multiple Streams Framework.

Concept	Criteria to receive that code
Problems	Code for problems if the respondent or document mentions a challenge that needs policy to solve (e.g. poaching, climate change).
Policy	Code for policy if the respondent or document mentions a solution meant to address a problem that has to do with institutions (e.g. rule making, enforcement, surveillance, sanctions), or existing laws.
Politics	Code for politics if the respondent or document mentions national mood, politicians, pressure group campaigns, competing interests, or political parties.

begin instead with an overview of the policy stream as this is essential in order to comprehend the wildlife conservation landscape in Eswatini. This provides the necessary context for introducing the main problems and political issues facing Eswatini decision-makers, communities, and wildlife populations. Though deviating from the traditional framework, putting the policy stream first highlights its significance within the Eswatini context and proposes a more malleable approach to multiple streams theory that is cognisant of individual/localized contexts. Based on interview data, the policy stream is the most important stream, with its components emphasized in every interview as the driving force behind wildlife conservation in Eswatini. This is an example of methodological co-production in which respondents were able to emphasize what they perceived as the most important components of the Eswatini conservation policy system. During the interviewing process, when the

Table 3
Variability across four institutions for wildlife conservation.

		Royal National Park	Community Based Wildlife Protected Area	Privately Managed Protected Area	Parastatal National Park
Policy Stream	National level institutions	Importance of Monarchy, Major role for Ted Reilly/Big Game Parks, Importance of the Game Act			
	Protected area institutions for managing wildlife reserves	Decision- making directly from the king/Ted Reilly/Big Game Parks	Decision- making from traditional chiefs with input from Big Game Parks	Decision- making from technical experts with input from Big Game Parks	
		Conservation plan is written down	Conservation plan is not written down	Conservation plan is written down	
		Enforcement by game wardens, drones, fences, substantial resources	Enforcement by community members with limited resources	Enforcement by game wardens, sufficient resources	Enforcement by game wardens with limited resources
	International institutions for managing wildlife	Enforces CITES, would need to drop high fences to allow Big 5 into other protected areas	Open to dropping high fences in Royal National Park enabling wildlife to move across international borders into South Africa and Mozambique throughout the Lubombo Transfrontier Conservation and Resource Area, a Peace Park		
	Partnerships	Managers provide enforcement capacity (rangers, intelligence, capacity building) to other parks	Managers receive capacity building for enforcement, anti-poaching, and agriculture from other parks	Managers provide enforcement capacity (rangers, intelligence, capacity building) to other parks	Managers receive capacity building for enforcement, anti-poaching, and agriculture from other parks
Problem Stream	Economic challenges	Funds wildlife management from visitors, declined due to Covid-19		Funds wildlife management from shareholder payments which did not decline due to Covid-19	Funds wildlife management from visitors, which declined due to Covid-19
	Socio-cultural challenges	People living in poverty generally do not buy into wildlife conservation and engage in poaching to feed their family			
	Built/natural environment	Climate change (drought)			
Politics Stream		Royal National Park	Community-Based Wildlife Protected Area	Privately Managed Protected Area	Parastatal National Park
	Instability from 2021 violent protests Calls for increases to human rights protections	Protests were anti-King, which threatened this protected area Game wardens do not support changes to the Game Act, and instead perceive it as being effective despite human rights concerns	Protests limited visitors and earnings If respondents work in conservation, they perceive the Game Act as being effective and not in need of reform, if respondents do not work in conservation, they perceive the Game Act as being too draconian and in need of reform	Protests limited visitors, but not earnings which come from Shareholders Game wardens do not support changes to the Game Act, and instead perceive it as being effective despite human rights concerns	Protests limited visitors and earnings If respondents work in local community capacity-building they perceive the Game Act as being too draconian and in need of reform, if respondent worked as a Game Warden, they support the Game Act

interviewer perceived that the respondent was placing importance on a component (stream) of the policy system, this was confirmed in the respondent’s own words at the time of the interview to make sure that theory refinement would be grounded in the words of respondents. What was initially perceived as the main problem motivating Eswatini conservation (the over-hunting of wildlife), our interviews showed instead that conservation in Eswatini is driven by the policy stream.

The Multiple Streams Framework helped us to reveal the policy system for wildlife management in Eswatini. The policy stream consists of four themes: 1) *national-level institutions* including the most important policy for wildlife conservation in Eswatini, the Game Act of 1953, as well as the most important conservation decision-makers in the country, the king of Eswatini and national level private and parastatal institutions; 2) *protected area institutions* for managing wildlife and habitat, which include decision-making processes over topics like wildlife harvest and viewing; conservation plans; and enforcement strategies; 3) *international conservation institutions*, such as treaties; and 4) *partnerships*, or any relationships where conservation stakeholder groups plan and implement policy together. Table 4 summarizes the themes in the policy stream.

5.1.1. National level institutions

The policy system is composed of national level institutions for managing wildlife and protected Areas, including the absolute monarchy of King Mswati III, the main law for wildlife conservation known as the Game Act of 1953, and the prominent and unique role of national-

Table 4
Policy stream themes.

Theme	Criteria for inclusion	Example quotation from interviews
National level institutions for managing wildlife and protected areas	Any stakeholder statements having to do with national level conservation policy, rules, enforcing rules, or decision-making (e.g. the Game Act, the king/royal family, and/or the various national scale government agencies tasked with conservation).	Respondent 30: <i>One key aspect of the 1953 Game Act (Amended) that helps Rangers like me and my men is that if we find a vehicle parked in a suspicious way in a suspicious area or at a strange hour of the night, poachers mostly operate late at night, we are allowed to search these people and vehicles without going to court to get a warrant. This is the additional teeth of the law, where if we catch people in the act, we are allowed to search everything.</i>
Protected area institutions for managing wildlife and habitat	Any stakeholder statements having to do with decision-making processes, conservation plans, and enforcement of rules within a protected area.	Respondent 4: <i>Before, we had Chief Mbandzamani, and he was able to persuade people to comply with conservation rules [...] those who are not directly employed by the project are less willing to follow the conservation rules, especially so without the chief.</i>
International institutions for managing wildlife	Any stakeholder statements on international treaties such as the Convention on Biological Diversity or CITES.	Respondent 29: <i>The fact that Big Game Parks has the authority to implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Game Act is due to the fact that the Head of State (our king) has the authority and ownership of wildlife.</i>
Partnerships	Any stakeholder statements on decision-making between two or more of the previous themes (e.g. national government, institutions, and international collaborations).	Respondent 27: <i>[The private wildlife protected area] brings our rangers and they explain the laws and penalties for poaching in the reserve. These lessons are like the "dos and don'ts of conservation" and we explain to communities what is banned by the Game Act in our reserve, the penalties that come with it, and the economic benefits of having healthy wildlife populations in Eswatini.</i>

level private and parastatal organizations. Understanding national level institutions in Eswatini is understanding the greater part of wildlife conservation therein because Eswatini is an authoritarian country, where the king holds absolute authority and also controls local government with his great influence over local rulers known as chiefs. Any political dissent is subject to harsh punishment (Freedom House, 2020).

5.2. Royal support for wildlife conservation

Respondents across all four wildlife management institutions noted the importance of the monarchy to Eswatini conservation. Beginning in the 1970 s, a continent-wide epidemic of rhinoceros poaching, driven by high prices for rhinoceros horns in the illicit wildlife trade, caused the African black rhino to nearly go extinct, with populations of 70,000 diminishing to just 3800 (Welz, 2012; Respondent #19). In Eswatini a decade prior, hunting had already driven many additional species of

wildlife, especially those that are interesting to safari tourists, to local extinction (Ramsay, 2014; Respondent #19). During this time, Eswatini's remaining wildlife species were few and clustered in Hlane Nature Reserve,² the king's royal hunting grounds (Brulliard, 2010; Respondent #1).

The royal hunting grounds embody the importance of wildlife to Eswatini culture. The Royal Hunt, known as the *Butimba* in the local language of *siSwati*, is an important part of Eswatini culture, occurring in the month of August and attracting tourists from all over the world. Swazis and tourists alike gather in large crowds to view the hunt, wear traditional dress, and partake in customs like traditional singing and dancing. When wildlife numbers began to decline in the 1960 s, the future of the *Butimba* was also in jeopardy, causing the king to take an interest in conservation (Respondent #1). In the words of one respondent,

Respondent 1: *Tourists come to see the Butimba, it is culturally very important and it is economically valuable. Without wildlife, you have no hunt.*

To avoid colonial overtones (e.g. taking widely known information amongst Eswatini conservation actors and presenting it as novel information) the authors emphasize that although the preeminent role for the king is unique in the context of theorizing wildlife policy, it is universally understood among Eswatini citizens. The importance of the king in the context of wildlife conservation is presented here as novel information due to the minimal amount of published research on wildlife conservation policy in Eswatini in English language, peer reviewed literature.

To manage declining wildlife populations, Ted Reilly, the most well-known Swazi conservationist, converted his private farm into the Mlilwane Wildlife Sanctuary in 1960. Reilly asked the late King Sobhuza II for permission and support to bring wildlife from the Royal Hunting Groups in the Hlane Nature Reserve to the Mlilwane Wildlife Sanctuary to start a protected area. The king was open to the idea because of the importance of the *Butimba*. Thus, Reilly and King Sobhuza II created the first of now 14 protected areas (Respondent #2), with Reilly ultimately reintroducing 22 species of locally extirpated mammals back to Eswatini (Dunn, 2020). The king's important role in wildlife conservation, and the willingness of Reilly to dedicate his own resources to making conservation happen, was described by respondents across case sites:

Respondent 23: *Ted Reilly convinced the king of Swaziland at the time [the 1970 s] that we needed to set aside a list of priority areas and turn them into protected areas. The model for this was Reilly's own farm, Mliwane.*

The most powerful wildlife management institution in Eswatini was formed through the partnership of Reilly and the king: Big Game Parks, a private, non-profit trust, which implements the most important national and international wildlife conservation policies, the Game Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Statements from respondents detailing this historical period of poaching, leading to the creation of today's wildlife conservation policy system dominated by Big Game Parks, Reilly, and the king, were also coded as falling within the problem stream of our framework. However, we introduce this information in the policy stream because in order to understand wildlife conservation in Eswatini, the unique and prominent position of power held by Big Game Parks and the king is essential as the main entities implementing the Game Act and CITES.

Big Game Parks was founded and is still run by the Reilly Family, which maintains a close relationship to the royal family. Big Game Parks

² The Hlane contemporary name is the Royal National Park, which serves as a case in this study.

receives no money from the Eswatini government.³ Its three protected areas,⁴ including Hlane Royal National Park studied in this paper, generate sufficient funds from visitors to be self-sustaining. Respondents universally noted that Big Game Parks “speaks for the king” where wildlife is concerned. For example, respondents in the privately managed protected area noted that if managers want to cull any animals (for considerations of the carrying capacity of the landscape), they must receive the approval of Big Game Parks. The following statement typifies these perceptions:

Respondent 19: *All wildlife belongs to the king in Swaziland. Anything that happens to them needs to be cleared by his wildlife management organization, Big Game Parks. This isn't an adversarial relationship though, we [privately managed protected area] get on well with them.*

The preferences of the king and Ted Reilly are widely perceived to be not only important but also one and the same, with Reilly advising the king that conservation must be adaptive, flexible, and with strong enforcement:

Respondent 26: *Reilly worked with the [parastatal national park] for 20 years. After that, he broke off, wanting more power to manage the parks on his own saying there was too much bureaucracy and corruption in the way. Reilly created Big Game Parks (this is the public private partnership that manages Hlane and the Game Act) on behalf of the king. So the Game Act is the king's law, and it is overseen by Big Game Parks, which is really synonymous with Ted Reilly.*

Similarly, respondents in the Community Based Wildlife Protected Area also noted the prominent role of the king, who visited their site in its early days, encouraged support for its formation. In Eswatini, chiefs act as local stand-ins for the king, with the chief voicing strong support for conservation, community members will typically follow. The king's role as an early adopter of community-based wildlife conservation in Eswatini is as follows:

Respondent 3: *When we first made this place, the king came to bless and open our facilities because it was a pretty new idea, and he was trying to show how communities can do similar development projects and build support.*

5.3. The game act and its amendments

The most important national conservation law is the Game Act of 1953, drafted by Ted Reilly himself and approved by the late King Mswati III. The Game Act was mentioned universally by respondents as a foundation for Eswatini conservation, a law that is effectively the will of the king. The Game Act establishes punishable behaviors in game reserves (such as banning hunting in a protected area without a permit), designates which wildlife species are protected, provides increasingly harsh punishments for poaching rare species of wildlife (e.g. the harshest punishments are reserved for rare wildlife like rhinoceros and lions), and clarifies lines of authority for enforcing hunting regulations (Government of Swaziland, 1999).

The Game Act was amended in 1991 to strengthen protections for important endangered species including elephants, both black and white rhinoceros, and lions. The amendment also increased the powers of game wardens to enforce the law. The 1991 Amendment codifies that all wildlife is owned by the king of Eswatini, and it requires that any hunting be approved and permitted by the national government. Respondents in the Royal National Park, the Parastatal National Park, and

Privately Managed Wildlife Protected Area viewed the Game Act as essential to ensuring Eswatini's biodiversity persists. Respondents in the Community Based Wildlife Protected Area tended to be generally supportive of the Game Act, but with some detractors arguing that banning the harvest of all wildlife made it hard on the poor who bear the brunt of the harsh sentences contained in the Game Act.

Interview responses reiterated the notion that the Game Act is considered among the harshest in all of Africa, with respondents highlighting that this is a widely held understanding (Respondents #19, 21). It authorizes game wardens to use firearms with lethal force when they even suspect poaching. Game wardens can search and arrest anyone anywhere in the country considered to be engaged in illegal hunting activity without a warrant and keep any confiscated vehicles or firearms unless an individual accused of poaching is acquitted (Respondent #21). Further, the law protects game wardens from lawsuits, giving them legal immunity.

Sanctions for violators are among the most severe on the continent. If one is convicted of poaching, they face five to 15 years in jail with no option to pay a fine. Further, the value of the taken animal must be paid back to the owner of the animal (the king), the owner of the land where the animal was taken, or to the government in that order, and failure or inability to do so results in another two years of jail time (Respondent #29). Corruption in the courts is prevented by a provision that states that if legal paperwork is lost, court employees can face jail time and fines (Respondent #30).

The Game Act was a theme of major importance to respondents from both the Private game reserve and the Royal National Park, with these respondents considering the Amendment to be a critical piece of legislation enabling park rangers to do their job with minimal bureaucratic or judicial oversight. The following representative quotation focuses on the powers of the Game Act helping game wardens successfully protect wildlife:

Respondent 19: *The Game Act and its Amendments [...] are crucial for us as reserve managers to be able to do our job. These help us to protect the animals, meaning if we find poachers on our reserve, and our lives are in danger (these men are often armed) we can counteract force with force, and not be held in any sort of criminal capacity under this law. The Game Act of 1953 and its Amendments give us the power to act to protect the wildlife on this reserve. This not only means that we can protect ourselves with firearms, but that we can also confiscate firearms that trespassers have on them illegally.*

The most important component of the Game Act according to respondents working in protected areas is that rangers can use lethal force to protect themselves and wildlife, although rangers can also apprehend them and bring them to the police which is more common. Respondents stressed that the ability to use lethal force when threatened allows them to navigate dangerous situations and counteract armed poachers that often operate at night and with significant firepower (Respondents #19, 20, 21, 22, 23). Respondents noted that following the Covid-19 pandemic and widespread loss of economic opportunity, illicit narcotics and other criminal activities were linked to and financed by poaching efforts, making encounters with these actors especially risky (Respondent #19). The following illustrates the importance of the amended Game Act:

Respondent 22: *The Game Act is the most important wildlife policy relevant to our job. Mainly, if you arrest somebody, say you find them with [wildlife such as] a wild dog, or carrying a gun or a snare on the reserve, entering without permission, cutting trees without a permit, we bring them to the police who then charge them under the Game Act.*

Some respondents from the Community Based Wildlife Protected Area pointed out that the amended Game Act is a flawed piece of legislation from a human rights perspective, giving game wardens disproportionate levels of power, with consequences falling on people trapped in poverty. The following quotation emphasizes this point:

³ The only exception is Hlane Royal National Park, where the government pays the salaries of its employees.

⁴ Big Game Parks also oversees three major protected areas: Mkhaya Game Reserve, Hlane Royal National Park, and Mlilwane Wildlife Sanctuary (Big Game Parks, 2021)

Respondent 10: *People here are hungry, anytime you hear about poaching it is because people need to make money. When they shoot animals from poaching, this is to make money off bushmeat to bring some income into their family.*

Whether Community Based Wildlife Protected Area respondents supported or opposed the Game Act depended on whether they were employed by the protected area. Those with jobs in conservation supported the Game Act, those with jobs in other sectors (agriculturalists, pastoralists) did not support the Game Act in its current form.

Other respondents noted that the 1991 Amendment was collaboratively drafted by global conservation experts; NGOs; the Ministry of Tourism, Agriculture, and the Environment; and was approved by the king. The amount of power it gives to rangers, they argue, is necessary for rangers to effectively protect Eswatini's wildlife.

5.4. National Parks run by Parastatal Organizations

One unique feature of Eswatini wildlife conservation is that many national parks are run by parastatal organizations within Eswatini's ministries. Parastatal organizations are owned by the government, possess political power, but are independent of the government. The parastatal organizations that are responsible for conservation are located in the Ministry of Tourism and Environmental Affairs. The king appoints the head of the Ministry, which oversees Eswatini's natural resources, working alongside Big Game Parks. The Ministry of Tourism and Environmental Affairs is responsible for synthesizing the country's reports to the secretariat to the Convention on Biological Diversity which detail the country's progress toward its National Biodiversity Strategy and Action Plan.⁵ Conservation-focused parastatal organizations include 1) the Eswatini National Trust Commission⁶ (ENTC) which oversees several important Eswatini national parks, conducts surveys to suggest new national parks, and manages protected areas⁷ ([Eswatini National Trust Commission, 2021a](#)); and 2) the Eswatini Environment Authority, the primary body which ensures that biodiversity is considered when national development considerations are made.⁸

Most important for the purpose of our study is the ENTC, which was created to manage Eswatini's national park protected areas on behalf of the government. Respondents pointed out that any decisions made in any protected area institution had to be cleared by Big Game Parks (and its patron, the king) because Big Game Parks implements both the Game Act and CITES alongside its portfolio of protected areas. This means that ENTC, and all other protected areas in Eswatini, fall under the overarching authority of Big Game Parks to manage wildlife that occurs in other protected areas like those managed by ENTC. In other words, the king and Big Game Parks are the top level authority, with everything else falling below:

Respondent 36: *We do not have big conflicts with any reserves and we have to work closely with Big Game Parks because they are the big [stakeholder]. They implement the Game Act, so if we have any management issues, like the need for permission to cull certain species, they need to know and approve.*

Interviews drew a clear distinction between the capacity of the ENTC and Big Game Parks/the king. Respondents noted that Eswatini's

government (ENTC) moves slowly on legislation, rule-making, and permitting due to its lack of resources. Big Game Parks, on the other hand, can move quickly because they are a private organization that answers directly to the king, not the government. The following interview excerpts illustrate this nuance to Eswatini conservation:

Respondent 31: *Big Game Parks is novel and creative because it is unlike any other agency (like [the] ENTC). [Big Game Parks] is private but has some functions of government (like permitting and the Game Act) but we are not slow like the government.*

Respondent 29: *I do not think that the same [abilities] would [exist] and the same [capacity for] enforcement, if this statute [The Game Act] was enforced by the government. It needs to come from a private group and it needs to come from the royal office, in order to get wildlife the prestige it needs to be conserved.*

5.4.1. Protected area institutions for managing wildlife reserves

In addition to national level institutions, protected area institutions are a key part of the conservation story in Eswatini, mainly through their processes for decision-making over management rules within protected areas, creating conservation plans, and enforcement. Most commonly, these protected area institutions have rules that focus on preventing hunting and placing limits on the collection of other natural resources (e.g. timber), with the management aim being creating wildlife viewing opportunities as a pathway to livelihoods and increased biodiversity. Despite the significant variation between institutions over decision-making there is one point of consistency: Big Game Parks and its patron the king are the ultimate authority over any management impacting wildlife population management.

5.4.1.1. Decision-making. Within protected area institutions, decision-making processes display significant variation. In the Community Based Wildlife Protected Area, decisions are made by a Trust made up of the chief, NGO technical advisors, protected area administrators, and village elders, who are not required to consult the entire village before making decisions but do consider popular support of any proposed actions. Decisions are made in a traditional way, by the chief of the village. The following quotation represents this process:

Respondent 1: *Here, the most important laws are from the chief. If anyone is poaching or doing anything related to wildlife, the chief is called in, and he settles the dispute maybe by making someone pay. Our chief, [late] chief Mbandzamani II has been dead for a few years now, and his possible successors have died, so there is political infighting in the village, so right now, that role is empty and things aren't working as well as they should.*

The respondent described an ongoing political crisis in the Community Based Wildlife Protected Area where the chief died without an heir, and now the main decision-maker and enforcement agent is absent resulting in a chaotic administration of the protected area and an uncertain future.

In the privately-managed wildlife protected area, decisions are made by two main actors: 1) an experienced land and wildlife manager for day-to-day, technical management interventions, with input on bigger decisions from 2) an advisory board made of Shareholders, or land-owners within the private reserve. The advisory board makes or approves decisions for the reserve, including making culling plans, managing finances, handling human resources, and planning for tourism. The advisory board also manages any conflicts between Shareholders. The finances of the Private game reserve do not rely on tourism but rather on fees collected from the Shareholders who own land on the reserve, ensuring crises in the tourism sector do not impact the reserve. This funding model ensured operations were able to continue during the Covid-19 pandemic.

⁵ The current edition of this plan details the strategic biodiversity goals Eswatini hopes to achieve by 2022, including goals such as 70% of all Swazi being aware of biodiversity's benefits and taking steps to conserve it ([Swaziland Environment Authority, 2016](#)).

⁶ Established by the National Trust Commission Act of 1972.

⁷ These include Malolotja, Mantenga, and the Mlawula Nature Reserves.

⁸ The Eswatini Environment Authority submits Eswatini State of the Environment Report, creates Eswatini's National Environmental Action Plans, and is the policing authority on environmental regulation in the country ([Motsa, 2021](#)).

Respondent 23: *Here in [the private wildlife reserve], the most important decision-makers are the Reserve Manager and then the Shareholders who own land and pay the levees. Within this is a board of directors who debate and make decisions.*

Decisions in both the Royal and the Parastatal National Parks are made by Big Game Parks and ENTC staff respectively, who are technical experts with training in wildlife sciences. While decisions in the ENTC are easy to trace to their responsible offices or committees, those of the Royal National Park/Big Game Parks are widely perceived as being made behind closed doors, often by Ted Reilly himself, with no input from the public or from interest groups, under the patronage of (and with the acceptance of) the king. Secrecy of decision-making arrangements was attributed to the need for discretion for management of high value poaching targets such as rhinos, species for which Big Game Parks is loath to provide specifics on numbers or conservation plans in the Royal National Park.

Big Game Parks was described as a public private partnership by many respondents; defined as institutions that can be used as tools to provide higher quality services to the public, so long as public private partnerships are well designed and implemented in a system with rule of law (World Bank, 2023). The Organization for Economic Cooperation and Development (OECD) likewise notes that public private partnerships should be transparent, legitimate, well resourced, and having value for money central to their creation (OECD, 2012).

5.4.1.2. *Conservation plans.* Within protected area institutions, conservation plans take many forms including written and unwritten. The Community Based Wildlife Protected Area for example had no written management plan for the reserve, which instead relied on administrative expertise within a trust organization, known as the Shewula Trust, for direction and conservation advice:

Respondent 11: *The conservation plan may not be written, it all comes from the [NGO called the] Shewula Trust, and that comes from the chief, the NGOs, the administrative staff, and people like that. I think there is a plan to reintroduce wildlife like giraffes one day.*

Instead of a written conservation plan, there are two main goals held by staff managing the Community Based Wildlife Protected Area: to ensure that big game such as giraffes return to the protected area and that hunting is forbidden within the reserve. As it stands, Big 5 animals do not currently live in the preserve, and the primary wildlife attracting tourists include birds and low populations of smaller mammals such as warthogs and antelope. Respondents said that poaching eliminated Big 5 animals in the 1960s, and for them to return would require either reintroduction or fences around the Royal National Park to be removed. The debate over removing fences will be discussed in later sections. If community members are caught poaching, they are brought before the chief and receive a punishment within the traditional system (usually a fine).

The Privately Managed Wildlife Protected Area has a written conservation plan created by staff, with input from managers from adjacent protected areas (Big Game Parks and ENTC), Shareholders, and the board which has an ecological committee dedicated to conservation planning. The Royal National Park's management plan is also written down and is the product of many different stakeholders' input, with the Reilly family exercising tight control, but with conservation actions made with input from ecologists, Big Game Parks executives, park managers, and park staff. Each park managed by Big Game Parks has a long-term plan, and day-to-day programming is decided upon by the park administration.

In the ENTC/Mlawula Nature Reserve's written management plan, the roles of all staff are defined in detail and updated every few years. The ENTC has less funding than other parks, and it does not have fences like the Royal National Park and the Private Game Reserve to help keep poachers out and charismatic wildlife in. This problem, however, has

been framed as an asset and a management opportunity. Because ENTC/Mlawula has no fences, they are able to enact ecosystem based management strategies where herds of wildlife (e.g. antelope) can move in historic migration routes.

Respondent 39: *Because ENTC has less money to work with, we actually are able to do a more "natural" form of management in the sense that we do not use fences to pen big game into our reserves. The down side to that is that most of our big game has been poached out of existence, but if we were to drop the fences in Hlane [Royal National Park] one day, the habitat here is natural and open for migrating game.*

5.5. Enforcement

Enforcement varied based on how well-resourced a protected area was, with Big Game Parks/the Royal National Park having the most substantial resources. Their most important enforcement mechanism was high levels of ranger surveillance, including night patrols and use of drones. To address the potential of corruption within their ranger units, Big Game Parks carefully selects individuals without local community connections who have experience on the landscape and demonstrate high levels of integrity.

The most important rule in the Royal National Park is that all lions and rhinos are housed within a high fenced area, and while there is a national conversation about dropping these fences to allow Eswatini's Big 5 to roam freely into other parks, neither Big Game Parks nor its founder, Ted Reilly, currently support this. They claim that the fences and constant surveillance are necessary to prevent the poaching of Eswatini's Big 5. The following statements provide additional details on the high quality surveillance that Big Game Parks enacts:

Respondent 32: *Wildlife is the entire purpose of Hlane [Royal National Park]... The most important way we protect wildlife is poaching prevention. Poaching is the biggest danger to the wildlife in the park. We have fenced in areas for the lions and rhino, but poachers come for antelope, wildebeest, and similar species to sell commercially as bushmeat.*

Surveillance and enforcement against poaching in the Community based wildlife protected area involved traditional laws and the importance of chiefs. At the local level, under the Tinkhundla system, Chiefs act on behalf of the king as the main enforcer of the Game Act in the villages with Community Based Wildlife Protected Areas. Chiefs also resolve conflicts between individuals, uphold traditional law, and mediate disputes about wildlife (such as poaching or grazing rights):

Respondent 4: *The major rules for us here are the customary rules set by the chief. The chief is the one who created the ecotourism project, and he has direct authority accountable only to the king. There are wildlife protection laws like the Game Act which, if someone violates the Game Act, they can be brought before the king and asked to pay a fine or do labor as a result.*

This suggests that the traditional system of Tinkhundla is essential when financial resources on the same scale as those in the Royal National Park are lacking. This is because the customary rules put in place by the chief, acting as the local representative of the king, are widely respected in the Community based wildlife protected area, and as such, this widely held respect requires fewer resources dedicated to enforcement.

5.5.1. International institutions

Eswatini works in tandem with South Africa and Mozambique to create and maintain the Lubombo Transfrontier Conservation and Resource Area (Peace Parks Foundation, 2021). This area is a Peace Park, or a designated area of land which is cooperatively managed between two countries in the name of peace, biodiversity conservation, socio-economic development, the maintenance of peace, and the sharing of culture (Convention on Biological Diversity, 2017). Repairing the

fragmentation of ecosystems (resulting from geopolitical borders and fences) benefits wildlife by restoring their ability to roam across these borders naturally.

For the Lubombo Peace Park to possess all historic species on its landscape, Big Game Parks managers would need to take down the high fences at the Royal National Park. The Private, Community Based, and Parastatal protected areas along with several NGOs strongly support this action, led by the ENTC. According to these respondents, dropping fences will increase wildlife and will lead to more tourists coming to Eswatini, which will lead to a stronger ecotourism sector to rival South Africa. In the representative words of one respondent,

Respondent 38: *The mindset today in Eswatini is fencing focused [with] a fear of wild animals. We [...] are working to overcome this, and do landscape scale conservation to return the landscape to its older way.*

This is the subject of ongoing debate, as detractors argue that fences are necessary to protect wildlife from poaching. Take for example the words of the following respondent,

Respondent 27: *We also want to convince [...] Big Game Parks and the royal family to drop the fences in Hlane [Royal National Park] and let the Big 5 wander freely. This is a distant possibility as the rhino and elephants and lions bring in a lot of money, and the Royal family will not give up the tourism money that goes right to them from Hlane, and Big Game Parks will not give up the power that comes from being close to the king.*

Ultimately, it is up to the king, Ted Reilly, and Big Game Parks if this action will be permitted—something they are unlikely to approve. Nevertheless, the following response suggests that the desire for this to occur is present in at least some members of the local community:

Respondent 38: *We are working on doing this with our desire to drop the fences. It will never happen unless our neighbors are convinced in [the Royal National Park]. The problem is that the animals currently in the fences over there are literally the king's animals as listed in the Game Act. Right now, very few get poached to the point where Swaziland is known for its lack of poaching of rhino. If the fences were dropped could we guarantee this would continue? We have been involved in several meetings where we are having initial discussions on whether this is feasible, but it will be a while before the most important people in the country are convinced that dropping the fences is the right move.*

It should be noted that the issue of human-wildlife conflicts was never mentioned by respondents, suggesting that the consequence of more wildlife on the landscape is not widely understood. Nearby studies of iconic wildlife conservation areas such as Kruger National Park and the Limpopo Province show that damage causing animals emanate from protected areas with significant impacts to the park's legitimacy in the eyes of local people (Anthony et al., 2010). The combined size of the four conserved areas (~35,000 ha) is likely insufficient for some of the more charismatic animals that are currently contained within the fences of Hlane. While the presence of species such as elephants, rhinos, and lions would substantially increase the economic potential of the other areas from an ecotourism perspective, the real threat of significant wildlife-human conflict cannot be ignored and careful planning would be required for release of these animals to be a success.

5.5.2. Partnerships

All respondents noted the importance of partnerships between the different types of protected areas, with policies governing protected areas virtually impossible to enact without meaningful collaboration. Partnerships are primarily to increase capacity in conservation, and tend to focus on education, where experts from better resourced wildlife management institutions provide training and skills building in lower-resourced settings. In the Privately Managed Protected Area, game wardens go to both the Community Based Wildlife Protected Area and the Parastatal National Park to educate those stakeholders about the social and ecological impacts of poaching. Game wardens in all

protected areas share intelligence with other game wardens to ensure poaching and illegal drug trade activities are stopped. They also go to local schools to teach about the importance of conservation and ecotourism.

Game wardens also focus on performing outreach to chiefs to get their support, and by proxy, the support of local communities for their conservation initiatives. Take for example the following quotation:

Respondent 19: *Yeah we definitely have to have good relationships with our neighbors as I have mentioned, with outreach to the nearby community [...] We have also done some serious work with outreach to the ENTC park of Mlawula, however, capacity over there is very low. We have had our rangers and our technicians (me) train some of them, but the fact that this is a government status job [low pay] meaning you see a ton of personnel changes over there.*

In sum, national level institutions (e.g. the king and the Game Act), protected area institutions (including decision-making, conservation planning, and enforcement), international and domestic partnerships make up the policy stream for wildlife conservation in Eswatini. The king's wildlife management priorities supersedes all, through the public private partnership with Big Game Parks, but substantial variability is still present in Eswatini's institutions.

5.6. Problem stream

The problem stream can be broken up into two common themes, defined in Table 5: economic challenges and natural and built environment challenges.

5.6.1. Economic challenges

Respondents from four wildlife management institutions cited the importance of economic challenges, with this theme exhibiting the most commonalities regardless of institutional type of wildlife management. The most important type of economic challenge was poverty and the use of poaching to alleviate poverty. In addition to poverty, equally important within this theme was the far reaching impacts of the Covid-19 pandemic, halting overnight one of the country's primary sources of income: tourism and ecotourism with none of the case study sites spared.

Within the Community Based Wildlife Protected Area, poaching was often discussed as a solution to hunger and the source of cash to purchase sundry goods. Poaching was widely known to lead to lower wildlife populations, but Covid-19 further constrained options for low resourced communities to access cash. The following statements are representative of this type of economic challenge widely repeated regardless of institutional type of wildlife management:

Respondent 21: *Now, the more dramatic and widespread challenge for [the Privately Managed Protected Area] remains poaching. Poaching is a massive problem. Most poachers come from Shewula, because many are poor there and want to sell the meat at a bush meat market. Many support their [community-based] nature reserve there, but many more poach all around, including their own reserve, it is why they have so few animals there.*

Economic Challenges created entwined political challenges focused on issues particular to Eswatini's traditional leadership, namely the role of the chief. Due to the expansiveness of poverty, interest in conservation was low without leaders actively supporting protected area institutions in their communities. In both the Community Based Wildlife Protected Area and the Privately Managed Wildlife Protected Area, the death of the chief several years prior to these interviews was cited as a key moment that left the community without a leader supportive of conservation. The late chief was the one who promoted the idea for the Community Based Wildlife Protected Area leading to its creation. He went door to door to speak with local headmen to garner support for the idea. At the time of this research, a new chief had not been named due to lack of a clear line of succession and continuing conversations about

Table 5
Problem stream themes.

Theme	Definition	Example quotation
Economic challenges	Any stakeholder concerns on poverty, livelihood loss, gaps in opportunity, and lost revenue. These statements also include stakeholder concerns on traditional management systems (chiefdoms), national level political institutions (the royal family, the conservation bureaucracy), or corruption/exacerbated poverty within those institutions.	Respondent 11: <i>Right now, Covid has made people really hurt. People are now a little bit harder to convince about tourism because when the tourism is banned, like it has been because of Covid, we see no visitors, and no sales for weeks.</i> Respondent 26: <i>Local people who do not have an education, and do not work in wildlife, see wildlife as something to hunt, eat, and sell. That is not criticism, that is reality. Poverty is very high in Eswatini, catching and killing animals and eating them or selling them is a way that people manage poverty.</i> Respondent 38: <i>The biggest issue is the loss of biodiversity. In our educational programs we emphasize the flora, fauna, and biodiversity. All are under threat. The main animals here are impala, kudu, wildebeest, nyala, and baboons. We teach locals and visitors to leave no trace, and enjoy and appreciate by watching. To increase appreciation of wildlife we teach them to track prints and identify species. The big stressor also is climate. The changing patterns of the rain is the major one we deal with. Hunger is increasingly widespread because rain patterns can ruin an entire year's worth of crops.</i>
Natural and built environmental challenges	Any stakeholder concerns relating to coupled human and natural systems (including the built environment (roads, clinics) and the ecosystems within the case study sites).	

who should take his place.

Respondent 19: *When this chief died, I have to say, the conservation urging or sentiment died with him, and now it is pretty unpopular, or let's say, it is under threat over there. We [at the Privately Managed Wildlife Protected Area] have done a lot of work to go over there and talk to people [in the community where the Community Based Wildlife Protected Area is located] about what we do here, and how they can do something similar.*

Respondents from the Privately Managed Wildlife Protected Area noted that poaching worsened with the death of the chief in their reserve as well (Respondent 21).

5.6.2. Built and natural environmental challenges

Climate and infrastructure related problems severely impact Eswatini communities and were unanimously mentioned side-by-side in interviews with an astute understanding that poverty, climate, and infrastructure are all systematically linked sources of vulnerability to Eswatini. Specifically, respondents emphasized increasing frequency and severity of droughts, arable land shortages, and a lack of infrastructure such as roads and clinics to improve well-being in agrarian communities. These problems ultimately tie back to Economic Challenges, worsening the poverty experienced by community members. In the Community Based Wildlife Protected Area, these challenges were seen as being in tension with support for wildlife conservation. If an individual is worried about hunger from a lack of arable land, the idea

that ecotourism through a community based nature reserve which removes arable land from rotation could encounter challenges.

Eswatini has, according to stakeholders, been suffering from severe drought since 2015, and a majority of respondents named climate change specifically as a cause. Climate change was cited by Parastatal National Park respondents as exacerbating poaching. Because climate change has led to extensive drought, reducing agricultural yields, this has led to hunger and increased rationale for poaching.

Respondent 38: *The big issue is poaching and climate. Poaching means that there is a tension between [the Parastatal National Park's] existence and the nearby community of Shewula. Climate issues are mainly in drought and precipitation. When peoples seasonal crops fail, they are driven to poach to make up the difference.*

5.7. Politics stream

5.7.1. Instability of the monarchy: the 2021 protests

The politics stream in Eswatini was characterized by pressure groups that engaged in violent civil unrest in the summer of 2021, as protesters and global leaders demanded reforms to the Eswatini monarchy. Protesters and interest groups were angered at the financial excesses of the monarchy, in a country with all political parties banned since 1973. Ostentatious, public displays of excess are characteristic of the king, who in 2004 spent \$24.4 million dollars on luxury cars for his family using public money (Respondents #2 and 3). The 2021 protests ignited over widespread poverty worsened by the pandemic, the death of a law student at the hands of state authorities, and members of parliament calling for an increase in democratic powers. Citizens delivered petitions to their traditional leadership in the *Tinkhundla* system asking for easing of authoritarianism, accountability among political leaderships, and increased democratic representation and an end to what many perceive as a royal kleptocracy. Violence, where protesters clashed with the police and the military, caused the king to leave the country, borders with South Africa were closed, dozens were killed, and the army was called in to restore peace. Shops and factories were burned, protesters were met with lethal force, and commercial air travel into and out of the country was paused.

While the absolute monarchy and the linked *Tinkhundla* system do make for long periods of stability due to their authoritarian systems, when these systems are contested, so too are conservation activities in Eswatini. Many respondents noted the link between the king and wildlife conservation, explaining that conservation and the crown were one, and if the monarchy were to fall as a result of these protests, it is possible that the anger aimed at the king could spill over into anger at protected areas such as the Royal National Park.

Similar dynamics, of an abrupt end to decades of authoritarianism and stability were observed at the local scale. The king of Eswatini gave his "blessing" to the Community Based Wildlife Protected Area, which greatly increased its legitimacy as a conservation option in Eswatini. The late chief at the time, Chief Mbandzamani, then upheld the king's wishes by legitimizing national law and persuading the community to comply with national conservation rules. After the death of the chief, the Community Based Wildlife Protected Area once again suffers among community members who no longer see its legitimacy or benefit with the loss of traditional leadership of the chief. One respondent summarizes this relationship as follows:

Respondent 2: *If the monarchy were to fall, anything that seems linked to it, even good things, risks being wiped away with it. While the monarchy needs reforms, there is the risk of losing all of the good, and bad, with reforms and protests. This is true locally as well, with the chief's project [the Community Based Wildlife Protected Area] possibly disappearing after his death.*

5.7.2. Demand for a balanced approach to human rights

In addition to the 2021 protests about the monarchy, another political movement gaining momentum involved pressure group activists who believe that the Game Act is responsible for human rights abuses due to its extreme stance on allowing rangers to use lethal force if threatened and perform searches and arrests without warrants. Politics, and thus the politics stream, is ultimately about competing tradeoffs, and this issue will need to be resolved, potentially simultaneously, with the linked issues of the protests against the monarchy. In the words of one respondent that are representative of others:

Respondent 27: I am not saying [the Game Act] is perfect. It gets criticized all the time for human rights violations. What I am saying is that because important people in this country value wildlife, the Game Act has teeth.

While the king and previous royalty have been a positive force for enacting conservation in the country, there are some negative sentiments felt toward the royal family. Specifically, they cited how the royal family would not let Royal National Park tourism money be reinvested in Eswatini. Instead, they were frustrated that the royal family kept it for themselves.

Respondent 26: There are a few very rich industries and families, especially the royal family. The king has a fleet of hundreds of luxury cars, And somehow we are the bad guys for not wanting poaching on our protected areas? I think these families who hoard wealth are bad guys, because if there was some more opportunity here for more people to earn money, there would be less poaching pressure.

The interviewees also highlighted the importance of rhinos and lions as the most important animals, and noted that their likelihood of survival is probably linked to the draconian enforcement of the law, as well as the strengthening of the Game Act in response to the period of intensive poaching in the 1990 s Eswatini known as the Rhino Wars:

Respondent 30: Critics of the 1953 Game Act say that it is strict or a human rights violation. But given our experiences with all of our game being totally wiped out before our Parks and Reserves were set up, plus the Rhino Wars of the 1990 s, it is a fitting solution to the unique context of Eswatini.

Many respondents in this study noted that although the Game Act works in Eswatini, it may not work everywhere, and that perhaps it only works due to the authoritarian monarchy.

6. Discussion and conclusion

Conservation is a multibillion dollar industry in Africa, thus understanding how it is implemented is important for managers of African wildlife and for citizens who may benefit from livelihood opportunities presented by tourism (Mitchell, 2021). The prominent role of the most important political actor in Eswatini, the king, is no doubt due to the immense value of wildlife tourism. Eswatini is a country with recent political instability and widespread poverty discussed by all respondents, yet it has significantly reduced poaching of Big 5 species compared to neighboring Southern African countries that are better known for conservation. For this reason, taking a deep dive into Eswatini wildlife conservation is necessary to inform regional conservation decision-making.

Our expectations were that there would be variability across the Multiple Streams in the four institutions for wildlife management (Royal National Park, Community Based wildlife Protected Area, Privately Managed Protected Area, and the Parastatal National Park) with this variability shedding light on important patterns in Eswatini's conservation system broken into the three streams of the Multiple Streams Framework. The power of the Multiple Streams Framework is that it allows analysis of policy, problems, and politics to enable a depiction of a complex policy system. Beginning with the policy stream, national

institutions, like the importance of the monarchy and the prominent role of Big Game Parks, influenced every wildlife management institution studied here. Protected area formation and implementation was the major policy response to wildlife conservation, engaging with partnerships with other management institutions to build capacity. The problem stream was characterized by economic challenges of poverty and emerging issues of a changing climate such as drought. The politics stream saw unprecedented instability from 2021 protests against the monarchy, which demanded increased representation for Eswatini's subjects under authoritarian rule of the king.

Of the themes summarized in Table 3, three themes were mentioned in every interview collected for this project, with perceptions that showed minimal variation across the four institutions: 1) in the policy stream, the importance of the king and his far reaching impacts in decision-making, 2) in the problem stream, poverty as the main cause of a negative perception of wildlife conservation and the main driver of poaching, and 3) also in the problem stream, the profound recent impact of climate change, specifically in the form of drought. In other words, we found that wildlife conservation in Eswatini is a system where above all else, the king has absolute power, set against the backdrop of high levels of poverty, and worsening conditions for humans and wildlife due to climate change.

The far reaching influence of the king and the fact that Big Game Parks acts on behalf of the king was a common perception regardless of the type of institution. Even day-to-day activities for wildlife management within the different types of wildlife management institutions (e. g., planned culls of antelope) required the approval of Big Game Parks, acting on behalf of the crown. Community buy-in for Community Based Wildlife Protected Areas hinges on the support of the king and, amplified by his local-scale counterpart, the chief. Support of the king and collaboration with Big Game Parks is fundamental to wildlife conservation in Eswatini. This was often cited as a reason that the Game Act was implemented too strictly, even at the loss of human rights protections. Thus, it is impossible to discuss Eswatini's success in conserving the Big 5 without crediting the authoritarian power of the king.

This suggests a fundamental weakness, however, due to the violent, anti-monarchy protests in 2021. If the royal institution were to fall, would conservation fall with it? Wilson (2019) notes that although conventional wisdom may dictate that space for conservation is limited in authoritarian settings, the reality is that similar to Eswatini, in other settings that lack political parties and a free media, there is evidence that conservation is possible, citing state-led conservation programs under Lenin's reign among others. Brain (2011) notes that even "Dictators like trees" (pg. 115). We build on the Multiple Streams Framework for decision-making, with the Eswatini case illustrating an angle to the framework with limited attention in the literature: authoritarianism. In this setting, it is not the majority that makes a decision, as has been studied in the Multiple Streams literature (Herweg et al., 2017; Knill & Tosun, 2020), but rather an individual that holds large amounts of power. The politics stream shows us that authoritarianism may seem strong, but if the system falls, wildlife conservation (seen as an embodiment of the king) will go with it. Thus, if stakeholders wish wildlife conservation to endure, it must move beyond its close attachment to the absolute monarchy.

The weakness suggested in the authoritarian policy system highlights a weakness in the Multiple Streams Framework, primarily in its failure to account for the total process of governance and the power relations in Eswatini. The Multiple Streams Framework's appeal can be found in its simplicity and its ability to break a complex system down to its component parts, problems, policies, and politics. However, as Larson and Petkova (2011) show, what gets lost is the idea of governance, defined as analysis of *who makes decisions* and *how decisions are made* from the national to the local scale. Governance requires attention to be paid to power relations. Future research on the multiple streams of problems, policies, and politics can benefit with a greater eye to power

relations. Larson and Petkova show that decisions on natural resources are a function of the relative power of various actors (2011). The 2021 anti-monarchy protests could have potentially spelled an end to the Royal National Park, Eswatini's most iconic wildlife management institution. Thus, the authoritarian regime of the Eswatini monarchy constitutes a gap in this research and a direction for future scholarship.

Scholarship documenting conservation in the tumultuous years that follow a political revolution may offer more insights to the question of what will happen to conservation in Eswatini if the monarchy were to fall. Archour et al.'s work examines forest cover in Tunisia in the years following the Tunisian Revolution. They find forest losses to have tripled in the political and economic instability that may follow a revolution (2018). Kanyamibwa (1998) detailed the consequences for conservation in the years that followed war in Rwanda over ethnic divisions, one of the largest human tragedies in the 20th century, where half a million died. Much of the impacts on wildlife were not studied or reported, but Kanyamibwa's work found that war negatively impacted flagship species like gorilla, habitat in iconic national parks like the Rwanda's Volcanoes National Park, and poaching increased in many protected areas, as did unsanctioned grazing of livestock, causing serious fragmentation and degradation of habitat (Kanyamibwa, 1998). Instability can lead to transboundary problems. Impacts like loss of wildlife from poaching, destruction of habitat, and degraded water quality were not contained in the borders of Rwanda alone. Rather, they were also observed in neighboring countries of the Democratic Republic of the Congo, Kenya, and Zambia, suggesting that a political revolution in Eswatini will impact domestic and international conservation (Kanyamibwa, 1998).

There is some evidence that suggests all wildlife conservation progress will not be lost were political turmoil and instability to continue in Eswatini. Plumptre (2003) in their study of the Democratic Republic of the Congo and Rwanda looked at wildlife managers during the war and genocide in the two countries. They found that wildlife conservation managers continue doing their jobs, even during instability and even after salaries stop being paid, because of noteworthy dedication to their profession and to their organization.

In the problem stream, across all four institutions, respondents emphasized the consequences of poverty as being a reason many turn to poaching and a cause of people not supporting wildlife conservation. It is hard to see conservation enduring in Eswatini without a significant reduction in the crushing poverty that mires the small country. Sub-Saharan African conservation has a troubling history of colonial legislation removing hunting and livelihood practices of Africans to protect European colonizer sports hunting and safari (MacKenzie, 1988). Research from Uganda shows that one of the most effective ways to stop poaching is to alleviate poverty (Harrison et al., 2015). Duffy et al. (2016) argue that defining poverty narrowly, as a purely economic problem, is overly simplistic and will not reduce poaching. They cite the need to understand local culture and behavior if we really want to use policy to reduce poaching, citing the example of Ibex hunting in the Himalayas, where local people were unwilling to stop hunting for a financial payout since the hunt was culturally tied to prestige and tradition (MacDonald, 2005). Thus, poverty must be better understood in Eswatini for the issue of poaching to ever be addressed.

To better understand poverty in Eswatini, better understanding what drives it is needed. Tolbert et al. (2023) argue that understanding the underlying drivers of poaching is essential to address illegal resource use. They found links between uncertain livelihoods, large families, and part time work with illegal poaching activities near Rwanda's Volcanoes National Park. Besides individual motivations for poaching, Sabuhoro et al. (2021); found that in Rwanda, the potential for gorilla tourism to alleviate poverty in communities was diminished by an inadequate government-run revenue sharing program, a dynamic which ultimately failed to reduce poaching in Volcanoes National Park.

Understanding what motivates poachers themselves may also provide Eswatini managers with tools to mitigate this problem. Mamba

et al. (2020) further explored the complex motivations of poachers in ecotourism communities, finding that in the communities next to Eswatini's Royal National Park, 20% of people will assist poachers for a payout, suggesting there needs to be more engagement of communities to stop these trends, but rationale may transcend pure economics. Combining the insights from Tolbert et al. (2023), Sabuhoro et al. (2021), and Mamba et al. (2020) suggests that it is individual hardships as well as flaws in government programs that may drive poaching in Eswatini. Our respondents cited family ties, resentment of the king's power, and other cultural reasons as motivations for poaching in Eswatini, and further understanding of these motivations is needed. In the Eswatini context, climate related stressors, such as a prolonged drought, lead to poor agricultural yields and a need to engage in poaching. Understanding how to better equip community members and farmers to meet the changing climate may help stem the complex poaching challenge.

Two important variations were present in our data between the four wildlife management institutions: the debate over dropping the high fences and the role of traditional power structures (chiefs). Perceptions on whether the high fences in Hlane Royal National Park should come down varied in such a way where all managers outside of the Royal National Park sought the fences to come down because this would mean the presence of tourist-drawing Big 5 species within their protected areas. Royal National Park respondents viewed this as a decision that needed to be taken carefully, with ecological benefits that included transnational conservation with historic species returning to their range, but with the risks of poaching still too severe to take this action today. Covid-19 causing increased financial hardship and criminal activities (possible incentives to lead to poaching) were cited as reasons why the pandemic itself may delay this conservation action. Additionally, the potential for unacceptable levels of human-wildlife conflict if the fences came down is a factor that must be considered in decision-making, yet was not mentioned by respondents. This suggests that many have not considered the real consequences of elephants and lions roaming the landscape, and the challenges that a conservation victory may have for long-run conservation itself.

Traditional power structures centered on a chief as the local stand-in for the king were more important in the Community Based Wildlife Protected Area. Strong support of the late chief in the Community Based Wildlife Protected Area is responsible for it being the first of its kind in Eswatini. Traditional institutions such as these can be credited with enacting conservation in the face of limited resources, with community members making rules for wildlife protection within their protected area, enforcing the rules with the help of the chief, and commercializing access to wildlife in the form of tourism. That said, some of the same weaknesses that royal, authoritarian conservation are present at the community scale, evident in the crisis created by a lack of leadership due to a crisis of succession. Without a chief, buy-in for community-based conservation is lessened without its champion, and enforcement of the Game Act is limited without the main arm of enforcement in place.

There is evidence from other countries of a similar model, where communities design and implement a protected area, such as in Zambia where rhino and elephant poaching led to the creation of a Community Based Wildlife Protected Area (Lewis et al., 1990). There, attitudes toward conservation became more positive as local economies improved (Lewis et al., 1990). Kideghesho (2008) notes four important criteria for traditional systems and Community Based wildlife conservation to be effective: 1) regulating the overexploitation of resources, 2) ensuring there are lessened conflicts between wildlife protection and communities, 3) low costs to enforce rules, and 4) complementing traditional and scientific knowledge to respond to ecological challenges. The case of Eswatini suggests a fifth, whereby the power of kings and chiefs to enact conservation can and should be balanced by the participation of other stakeholder groups so that when crisis of succession or a violent protest movement threaten the viability of conservation, there are some assurances that it will endure and go beyond the power of kings and chiefs.

Our research shows Eswatini conservation to be effective due to draconian laws, an authoritarian system, cultural links to wildlife, a role for traditions and customs, and unique institutions for wildlife management. However, ongoing political disruption and high poverty levels are putting increasing pressure on the stability of the existing socio-political system. Thus, challenges of human rights, poverty, demands for democratic systems of governance, and climate change will need to be addressed for Eswatini to continue to be the most likely place in the world to view a rhinoceros on safari.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests. Kelly Dunning reports financial support was provided by National Academies of Sciences Engineering and Medicine. Kelly Dunning reports financial support was provided by Alabama Agricultural Experiment Station.

Data availability

The data that has been used is confidential.

Appendix

Interview questions

Demographic questions

1. What is your job/what type of business do you do?
2. What is your age?
3. What is your family's average income in a normal year?
4. What is your gender?
5. How many children do you have?
6. Wealth: Do you own land? How much? Acres, etc.?
7. Wealth: Do you own any cows? If so, how many cows do you own?
8. What level of education do you have?
 - a. Primary
 - b. Secondary
 - c. University
 - d. Graduate

Questions on wildlife and ecosystems

9. How is your livelihood related to wildlife? (Or how can it be in the future).
10. Can you give me an example of a way you use wildlife (consumption or non consumption)?
11. I am going to read you some statements, and ask you to rate your level of agreement:
 - a. I care about protecting wildlife.
 - i. Strongly Agree
 - ii. Agree
 - iii. Neutral
 - iv. Disagree
 - v. Strongly Disagree
 - b. People in my community care about protecting wildlife
 - i. Strongly Agree
 - ii. Agree
 - iii. Neutral
 - iv. Disagree
 - v. Strongly Disagree
 - c. Wildlife protection has the ability to increase economic opportunities for people in my family:
 - i. Strongly Agree
 - ii. Agree

- iii. Neutral
- iv. Disagree
- v. Strongly Disagree
- d. I am interested in keeping game species here (Follow up: why or why not, which types)
 - i. Strongly Agree
 - ii. Agree
 - iii. Neutral
 - iv. Disagree
 - v. Strongly Disagree
12. Who are the different groups whose interests impact wildlife? (i.e. farmers, forest dwellers, foresters, etc.) Is there any conflict there?
13. What species of wildlife would you want present to increase ecotourism (i.e. big megafauna, birds, some species, predators?)
14. What are the most important environmental stressors impacting your community?

Policy and decision-making

15. What important international, national, and local laws and regulations do you need to follow when interacting with wildlife?
16. Tell me about your organization's conservation plans. Who wrote the plan, who implements it, how is it implemented, what are the challenges?
17. Who are the most important players with decision-making and management?
18. How are conflicts resolved?
19. How have the laws/policies/rules/plans about wildlife changed through time?
20. Changing laws/policies/rules about wildlife is possible:
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
21. How do you or your wildlife management organization respond to crises/problems? Can you provide an example of a time you did this?
22. Tell me about a time when you enacted conservation in new or creative ways? (i.e. a new project, new tourism venture, new plan, etc.)
 - a. Did you have to persuade others to help you with your idea or project?
 - b. Were there any costs for you to implement this idea or project?
 - c. Was there any risk to you to pursue your idea or project?
 - d. Did you need to wait until the right moment to make this happen?
 - e. Did you have to get others to work together to implement your idea?
 - f. How do wildlife managers convince their fellow managers to buy into their ideas? Can you provide an example of a time you did this?
 - g. Does your idea follow laws on the books, or is there a need for reform (such as land reform etc.)?

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