

# Playing the CITES game: Lessons on global conservation governance from African megafauna

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## Abstract

Growing awareness and concern over environmental issues has been accompanied by a proliferation of international environmental agreements during the last half-century. Among these, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), stands out as one of the oldest and strongest influences on global biodiversity conservation policy. However, the effectiveness of CITES has been questioned—for various reasons and from various quarters—with a range of differing opinions. To provide further insight on this issue we drew from and built upon recent advances in the environmental governance literature to develop an approach to analysing how the CITES-centred wildlife trading regime influences actor behaviour. After developing a rule-categorised framework to analyse the structure of the treaty, we conducted dynamic analysis of actor behaviour using case study material on CITES-listed African megafauna species (elephants, rhinoceroses, and lions), examining recent developments over a five-year period (2016–2020). Drawing on this material, we further applied institutional diagnostics to gain insight into the conservation effectiveness of the CITES regime. Our analysis of these case studies suggests that CITES can be gamed by special interest groups and that its institutional design facilitates the evolution of an international prohibition regime. Our research produces novel insights into the operation of this process and raises concerns about consequences for African biodiversity conservation. We conclude with recommendations for wildlife trade policy reform and further research.

## KEYWORDS

elephants, institutional diagnostics, international environmental agreements, lions, rhinos, wildlife trade policy

## 1 | INTRODUCTION

International trade in endangered species has attracted the attention of wildlife conservationists and regulators for more than a century and is subject to conflicting perspectives and policy positions. Threatened African megafauna—notably elephants, rhinoceroses (hereafter rhinos), and big cats—are of particular interest to influential non-state

actors, who in turn have played a central role in shaping the global governance of wildlife trade (Duffy, 2013; Epstein, 2006). In the broader context, growing political recognition of environmental concerns that transcend national boundaries has spawned a rapidly expanding agglomeration of international environmental agreements over the last half century. Among these concerns, global biodiversity loss stands out as especially pressing (Díaz et al., 2019; Rockström

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et al., 2009) and intractable, given that agreed targets for reducing such loss remain consistently unmet (Pettersson & Stoett, 2022). Iconic megafauna species have acted as 'flagships' to mobilise public support for biodiversity conservation initiatives, thereby influencing policy directions (Knegtering et al., 2002; McGowan et al., 2020). However, as with biodiversity in general, the status of these species in the wild remains perilous (Ripple et al., 2016, 2017), calling into question both the effectiveness of contemporary conservation governance and the role of such flagships.

The evolution of global environmental governance has been accompanied by developing scholarship on the functioning of international regimes, that is, on how they work, how effective they are, and scope for improvement (e.g., Bernauer, 1995; Miles et al., 2002; Oberthür & Gehring, 2006; Young, 1982, 1999, 2018). Amid this broader literature, a substantial subset focuses on the biodiversity regime complex. Two of the key international agreements within this complex are the 1992 *Convention on Biological Diversity* (CBD) and the older *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES), which was ratified in 1975 and focuses on addressing deemed threats to species from international trade. Opinions differ over which of these two treaties plays the most salient role in contemporary conservation governance but there is widespread agreement that CITES plays a major role in influencing biodiversity conservation policy and practice (Lanchberry, 2006; Velázquez Gomar, 2016).

There is less agreement on the effectiveness of CITES. Opinions vary with disciplinary lenses, ideological inclinations, and the assumed purpose of the treaty, which is somewhat unclear and contested (Bowman, 2013; Dickson, 2003). Furthermore, as Young (1994) has noted, the general concept of effectiveness as applied to an international regime is at best a multidimensional variable, if not a set of distinct but related variables. A review of past CITES evaluations confirms this and raises questions over the most appropriate way to consider the treaty. Prominent scholars have recently argued that such evaluations of environmental governance should adopt a diagnostic interdisciplinary systems approach (Ostrom, 2007; Ostrom & Cox, 2010), grounded in the context of sustainability goals (Agrawal et al., 2022; Biermann et al., 2012; Burch et al., 2019) and complexity science (Anderies et al., 2004). We concur and hence investigated how CITES contributes toward conserving flagship species of African megafauna in this context.

Having considered key insights from previous broader scholarship on biodiversity regimes and CITES effectiveness (as detailed below, and in Sections 2 and 3.1), we revisited a previous evaluation of four megafauna case studies (T Sas-Rolfes, 2000) but applied a more rigorous dynamic institutional analytic approach (Woldendorp & Keman, 2010; Young, 2010) with a focus on actor behaviour, and informed by institutional diagnostics (sensu Young, 2011; Schouten et al., 2018). We drew from a range of work in the environmental governance literature (e.g., Chambers, 2008; Curlier & Andresen, 2002; Young, 1999, 2002, 2008, 2018), to develop a framework for analysing CITES and employed this framework to consider relevant aspects of nested case study material applying to African elephants, rhinos,

and lions. We examined both the longer span of literature concerning the case study species over the life of the treaty and a more detailed analysis of recent events spanning a five-year period (2016–2020), during which the first author participated in CITES-related policy processes and conducted a parallel thematic investigation into trade policy conflict (T Sas-Rolfes & Gooden, 2024)—this included examining the interactions between global CITES initiatives and those in one salient country, South Africa.

Our research question concerned how CITES shapes (i.e., guides and constrains) the behaviour of actors influencing conservation outcomes, grounded in the notion that institutional arrangements shape human interaction, which in turn affects performance (North, 1990). Building on the insight gained from the parallel study—that is, that different actors are motivated by multiple and oft-conflicting interests, ideologies, and policy narratives—we investigated how actors pursued their specific objectives within the confines of the treaty rules. We found that, in several instances relating to the case study material, at least some actions and outcomes did not align with broader official international objectives of contemporary biodiversity conservation and sustainability practice; instead, they reflected the narrower objectives of certain special interest groups.

Our research contributes to an ongoing discussion that spans several decades, and which highlights persistent conflicts within the CITES community and raises questions about the treaty's evolution, effectiveness, and purpose (e.g., Bowman, 2013; Couzens, 2013a, 2013b; Favre, 1993; Princen, 1994; Sand, 1997; Wandesforde-Smith, 2016). Whereas the parallel study used the same case study material to examine the ideational elements of conflicting policy stances, our novel contribution here focuses on the evolving interactions of strategic actor behaviour and the structure of the Convention. This approach aligns with calls for more in-depth research on interactions between 'architecture and agency' (i.e., institutional dynamics, and relationships between actors and structures) in relation to Earth System Governance more generally (Burch et al., 2019) and for investigations of political processes and influence within CITES more specifically (Challender et al., 2015).

We proceed as follows: Section 2 provides a brief overview of relevant literature; Section 3 provides details of our approach and methods; Section 4 presents our results based on the case study research; Section 5 discusses lessons learned and the implications for global conservation governance of African megafauna; Section 6 concludes with a brief reflection and recommendations for possible policy reform and future research.

## 2 | LITERATURE REVIEW

We briefly review literature on the evolution of CITES and its effectiveness, both in conserving the case study species and more generally; we include some additional useful contextual references within the broader literature on environmental governance and institutional analysis. Transatlantic attempts to regulate interjurisdictional trade in certain wild species date back to the early 20th century, with limited

initial success (Sand, 1997). The establishment of a global treaty was facilitated by the mid-20th century creation of the International Union for Conservation of Nature (IUCN), a coalition between governments and civil society organisations (Boardman, 1981). Although conceived by IUCN legal experts, the United States (USA) played a dominant role in the formation of CITES during the 1960s and early 1970s, during a time of peaking political hegemony (Keohane, 1984). The treaty text echoed the regulatory logic of the newly drafted US Endangered Species Act, was agreed in 1973 in Washington DC, and the USA was the first country to ratify it in January 1974; CITES entered into force in July 1975 (Epstein, 2006).

The initial design logic of CITES has shaped its evolution and is dominated by a system of listing species on appendices and regulating their trade accordingly (Wijnstekers, 2018). Significantly, commercial international trade in species listed on CITES Appendix I is prohibited, as they are considered threatened with extinction and affected by such trade. For Appendix II listed species, such trade is regulated through a permitting system, to mitigate potentially unsustainable levels of exploitation. The treaty also allows its member states to implement stricter domestic measures. Accession to the treaty has been gradual, with the number of Parties growing from 14 member states at ratification in 1975, to 183 nations plus the European Union (EU) in 1922; in contrast, the uptake of the CBD was rapid, surpassing CITES only 2 years after being signed (Escobar-Pemberthy & Ivanova, 2020).

Threatened by rampant poaching for rhino horn and elephant ivory, by early 1977, the African case study species had all been listed on either Appendix I (rhinos) or II (elephants and lions). However, poaching of African rhinos and elephants persisted, prompting a controversial decision to list the latter on CITES Appendix I in 1989 (Glenon, 1990), preceded by unilateral action by ivory ban proponents such as the USA (banning imports) and Kenya (destroying stockpiles). Whereas the listing decision initially deflated ivory markets, poaching resumed within a few years (Dublin et al., 1995), and accelerated significantly in 2007 (Wittemyer et al., 2014). Rhino poaching was effectively suppressed from the mid-1990s, following the successful imposition of political pressure from the USA on the key consumer countries to ban their domestic markets; however, it also resurged after 2007 (di Minin et al., 2022).

The 1989 elephant listing decision (ivory ban) was strongly contested by several southern African (SADC) countries, who eventually succeeded in lobbying for the CITES Parties to approve two restricted one-off ivory sale events, in 1999 and 2008 ('t Sas-Rolfes et al., 2014). Opinions differ on both the effect of these sales and on whether any future trade should be permitted. The question of ivory stockpile sales is the subject of an extended discussion in the economics literature (e.g., Barbier et al., 1990; Bergstrom, 1990; Bulte & van Kooten, 1996; Fischer, 2004; Heltberg, 2001; Kremer & Morcom, 2000; van Kooten, 2008) and scholars have also debated the merits of legalising international rhino horn trade (e.g., Ayling, 2013; Biggs et al., 2013; Brown & Layton, 2001; Collins et al., 2016). Most of these discussions are largely theoretical, however, as robust evidence on the conservation impact of trade restrictions on these species remains limited (Hiller & 't Sas-Rolfes, 2024).

Broader discussions on the effectiveness of CITES have evolved since an initial positive legal evaluation (Lyster, 1985) was followed by a critical review (Kosloff & Trexler, 1987), which cited both theoretical and empirical concerns. In response to criticism, the CITES Parties amended the listing criteria in 1994 (Young, 2003) in a move considered by some as less restrictive and thus positive for conservation (Carey, 1999); however, further evaluations took place during the late 1990s (Sand, 2001) with the Convention drawing more criticism, for varying reasons, from legal and other scholars (e.g., Baker, 1999; Hutton & Dickson, 2000; Matthews, 1996; Reeve, 2002). The broader literature on environmental governance evolved substantially during the 1990s (e.g., Bernauer, 1995; Haas et al., 1993; Rosenau & Czempiel, 1992; Young, 1994), stimulating related subsequent critical assessments of CITES during the early 2000s (e.g., Curlier & Andresen, 2002; Epstein, 2006; Lanchberry, 2006).

The resurgent elephant and rhino poaching crisis and the start of a novel export trade in lion skeletons from South Africa in 2008 (Williams & 't Sas-Rolfes, 2019) coincided with US initiatives to link wildlife trafficking with international security concerns and thereby realign foreign conservation assistance policy (Massé & Margulies, 2020; McMurray, 2009). This approach received wider support, notably from the UK government and royal family, who convened an international initiative through the catalytic 2014 London Conference on illegal wildlife trade. These events signalled a turn against further trade restriction easing.

The subsequent literature on the effectiveness of CITES and related measures reflects widely divergent views. Some legal scholars provide generally optimistic assessments of CITES (e.g., Bowman, 2013) but many express concerns. Some argue for increased regulation and enforcement (e.g., Wiersema, 2013, 2015, 2016) or radical reform (Couzens, 2013b). Others identify limitations of the regulatory approach (e.g., Adam, 2014; Elliott, 2017; Trouwborst et al., 2017; Wandesforde-Smith, 2015, 2016), notably in the face of institutional complexity and varying (often conflicting) social norms. This latter concern is echoed in the conservation science literatures (e.g., Challender et al., 2015; Duffy, 2013; Hübschle, 2017).

The 21st century environmental governance literature has proliferated with a growing focus on causality, effectiveness, and institutional design, embracing various institutional analytic approaches (e.g., institutional diagnostics) within a complex social-ecological systems context (e.g., Biermann et al., 2010; Oberthür & Gehring, 2006; Young, 2002, 2008, 2017). Whereas legal scholars have examined links and comparisons between CITES and other treaties (e.g., Chambers, 2008; Couzens, 2013a; Janssens & Trouwborst, 2018), evaluations to date have not taken place in a dynamic systems context, nor engaged deeply with concepts of institutional interplay, fit, and scale. Young (2010) applied dynamic institutional analysis to several environmental regimes but not CITES. Tools for dynamic institutional analysis are provided by literature on corporatist intermediation (Woldendorp & Keman, 2010), which distinguishes between four types of government strategy toward policy conflict (passive, co-operative, congruent, and guiding) and three types of strategy employed by all actors in pursuit of their goals (confrontation, bargaining, and problem-solving). Observing actor behaviour through the lens of these

strategies and their likely outcomes, is an approach toward analysing CITES that remains hitherto unexplored.

### 3 | APPROACH AND METHODS

#### 3.1 | Approach

As an institutional structure, CITES could theoretically be considered as an intervening variable with consequences within the broader global biodiversity regime (Krasner, 1983). However, evaluating the treaty's effectiveness is challenging for several reasons, some of which apply to the analysis of all such institutions (see Bernauer, 1995). Evaluating CITES in narrower legal context implies assessing whether it achieves its specified objectives, which is an easier task in theory than evaluating it within a broader institutionalist framework that considers other issues such as influence on social norms (Chambers, 2008). However, even evaluating CITES more narrowly in this way is confounded by the complex nature of both the Convention and the loosely defined issues it attempts to address for thousands of diverse species across widely varying contexts. Even a basic assessment of the entire CITES regime as a single variable influencing species conservation success is further challenged by both a paucity of counterfactual analytic opportunities and the complexity of determining such success (see Redford et al., 2011).

Recognising these challenges, we chose to focus on a narrower research question concerning prominent species of African megafauna as an indirect approach to improving our understanding of the treaty's effectiveness. Simply stated, with respect to conserving the selected species, our research question asks: How does the CITES regime shape actor behaviour? To tackle this question we employed a dynamic institutional analytic approach toward selected nested case studies. This entailed examining and elucidating the regime structure as determined by the treaty rules and observing how relevant actors approached the issues in pursuit of their objectives as guided by the regime. Our nested approach entailed engagement at the international level (CITES meetings) and nationally within South Africa, which provided a suitable sample for two reasons: (1) it represents a frontier in radical and controversial innovations in wildlife commodification (e.g., commercial captive lion breeding) and (2) its government undertook a comprehensive review of trade policy toward iconic species during the study period (DFFE, 2020), facilitating additional observation of non-state actor lobbying efforts.

We conducted our analysis in three parts. First, we situated the treaty structure within a rule-categorised analytical framework, for which we drew on the Institutional Analysis and Development (IAD) framework (Ostrom, 2011). The IAD framework provides a conceptual guideline for analysing rule types and their respective influence on elements of actor behaviour at three different levels – constitutional, policy, and operational (Baldwin et al., 2019). Second, we built on the parallel study of t Sas-Rolfes and Gooden (2024) by examining specific elements of actor behaviour in relation to the case study species over the five-year period, with a focus on how such elements are shaped by the CITES rules framework. Finally, we applied institutional

**TABLE 1** Governance needs: Checklist of factors.

| Problem structure and characteristics | Scope: Spatial and temporal dimensions                                                                                           |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Actors                                | Nature of the problem (issue area, type, etc.)<br>Number and types<br>Behavioural and other characteristics                      |
| Broader system properties             | Connectivity and nature of dynamics                                                                                              |
| Socio-political setting               | Socio-economic conditions<br>Political context (systems, distribution of power, etc.)<br>Interplay among issues and institutions |
| Knowledge conditions                  | Level of (un)certainly regarding the nature of the problem<br>Level of (un)certainly regarding options and probable consequences |

Note: Adapted from Young (2018).

diagnostics (Young, 2002, 2008) to the case study material to gain further insight into the effectiveness of CITES in contributing toward biodiversity conservation.

An institutional diagnostic approach assesses how institutions match to specific biophysical and socio-economic conditions at appropriate scales and highlights the significance of all stakeholder actors and their incentives. In this context, we view institutions as rules that structure social interaction, *sensu* Hodgson (2006). The premises for this approach include that institutions should be resilient, but adaptable; that formal and informal institutions should align; and that institutions should 'fit', that is, be well-matched in terms of scale and socio-economic setting. This stands in contrast with an ideological approach that would impose the same systems on all situations. Whereas the exact diagnostic tools that are most suited to analysis will vary between specific situations, a checklist of applicable critical factors provides us with some useful guidelines—see Table 1, below, adapted from Young (2018).

For our case study species, we therefore identified key CITES-linked policy issues and drew on these guidelines for analytical context, focussing on the actors that engage with these issues and their stances on these. To gain deeper insight into actors' behavioural and other characteristics, we further examined their stated objectives, actions, and strategies, including their use of and engagement with empirical evidence, as detailed below. We then considered the extent to which actor behaviour in these instances was shaped by the CITES rules framework. Finally, we assessed whether such behaviour is aligned with achieving species conservation objectives and, where possible, consequent conservation outcomes.

#### 3.2 | Methods

The principal methods for this research consisted of document analysis (Patton, 2015) and participant observation (DeWalt &

DeWalt, 2010), supported by various direct engagements (including interviews) with key informants. Following an exploratory literature review to gain a deeper understanding of the CITES treaty, key actors, and case-study relevant policy issues, data collection took place from January 2016 to December 2020, concurrent with the parallel study on ideational elements (t Sas-Rolfes & Gooden, 2024), and largely employing the same methods, which are detailed in that study and summarised below. Ethics approval of the research methods employed for both projects was granted under the Oxford University CUREC system, reference # SOGE 1A-170. In addition, the first and second authors of this study analysed relevant CITES documents (including the main Convention text, Rules of Procedure, agenda items, Resolutions, and Decisions) and drew on their extensive experience of engaging with policy processes via the Convention (which included attending numerous CITES and related meetings both during and prior to the five-year case study sample period).

To assemble the case study material, the first author identified CITES agenda items that affected the relevant species, both directly and indirectly, and tracked the progress of these issues through personal attendance of the nine official CITES meetings (all Conferences of the Parties and meetings of the Standing and Animals Committees) held during the study period and various related engagements, noting all significant policy decisions and how they were reached. At the CITES meetings, all key points of formal interventions were also noted, along with the identity of the actors making those interventions. Supporting information on actor identities and positions was obtained by examining official CITES meeting records and actor statements through websites, social and other media statements, and printed material distributed at meetings. The first author also conducted and recorded nine face-to-face semi-structured key informant interviews with senior representatives of state, hybrid (IUCN), and non-state actors across a spectrum of policy stances. Interviews lasted  $93 \pm 54$  (mean + SD) minutes. Finally, by participating in the CITES-related policy process in South Africa relevant to the case study species, the first author was provided access to 75 written submissions from non-state actors, comprising 2078 pages, and representing a full spectrum of positions. Further detailed information on these case study data collection methods is provided in t Sas-Rolfes and Gooden (2024) and its supplementary material.

To generate the rule framework, the first and second authors scrutinised the CITES Rules of Procedure (CITES, 2013), guided by the rule typology descriptions provided by Baldwin et al. (2019). Interpretation was reached by mutual agreement. To analyse the case study material, the first author examined the lists of relevant CITES agenda items and South African policy issues and the recorded decisions and outcomes relating to these during the study period, revisiting the historical context where appropriate. These policy developments, already partly detailed by t Sas-Rolfes and Gooden (2024), were reviewed from the perspective of actor positions by (i) drawing on the lists of actors that made formal representations and then (ii) coding specific actor characteristics, including their positions, interests, policy stances, and revealed strategic behaviours, following Woldendorp and Keman's (2010) classification system.

Supplemented by the thematic information obtained by t Sas-Rolfes and Gooden (2024), examining the landscape of classified actor

positions and strategic behaviour across the case study issues enabled the identification of non-state actor clusters in pursuit of specific outcomes. An identified subset of 14 diverse non-state actors engaged at both the international (CITES) level and within the domestic process in South Africa and was analysed in more detail to gain further understanding of positionality and behaviour, and to identify significant patterns. To enhance reliability of coding results, the first author applied several triangulation techniques throughout the research period (Miles & Huberman, 1994), including multiple iterations within a flexible hierarchical coding frame, using a combination of inductive and deductive coding methods, and cross-referencing across multiple sources at the two (international and national) scales. Coding was conducted using combinations of manual document marking (notebooks with handwritten records and printed documents) and MS Excel spreadsheets—see S1 for further details.

For the final step of the analysis, the identified patterns of actor behaviour were considered in the context of the rules framework and assessed in relation to the objective of species conservation. To assist with the latter task, we compiled a list of questions, drawing on Young's (2002, 2008, 2018) work on institutional diagnostics and based on the Table 1 checklist to develop a structured approach to interrogating the data. To answer the questions, we drew on insights gleaned from the conservation and other literature, the authors' experience from participant observation and, in some instances, more specific targeted research. Details of the questions appear along with the answers in S3.

## 4 | RESULTS

We present our results in four parts, building on the findings of t Sas-Rolfes and Gooden (2024). First, we present an overview of the CITES rule framework and identify key characteristics. Second, we present salient facts from each of the case study species, providing brief historical context followed by an account of how actors influenced policy developments during the five-year period, and the apparent motivations for their stances and actions. We then draw on common themes across the cases to present the landscape of interests, positions, and institutional dynamics. Finally, we provide a brief diagnostic overview, first considering how the rules framework shapes actor behaviour and then providing a broader assessment in relation to whether the treaty effectively steers actors toward achieving species conservation outcomes.

### 4.1 | Rule framework

Table 2, below, provides an interpretive summary of the CITES rules framework and further details are provided in S2. The treaty is dominated by state actors (the Parties) with secondary roles assigned to intergovernmental organisations (IGOs) and non-governmental organisations (NGOs), and national governments acting as gatekeepers for the latter, assisted by the CITES Secretariat. Species listings carry greater legal weight than other collective decisions but require

**TABLE 2** CITES rule framework.

| Rule type          | Description/Function of rule type/Details specific to CITES                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Position</b>    | <b>Create formal positions that actors may hold in the CITES regime</b>                                                                                                                       |
|                    | Only Parties can vote and have priority speaking rights; other (accredited observer) speaking rights are ranked, IGOs before NGOs, and none for media; some relevant actors are unrepresented |
| <b>Boundary</b>    | <b>Define who may hold the position and how the position is assigned, passed on, and exited</b>                                                                                               |
|                    | Only national governments and the EU can be Parties; observer IGOs and media must be approved by CITES Secretariat; NGOs must be approved by host governments                                 |
|                    | Parties may leave the Convention by giving 12 months notice to the Secretariat; observers may be removed from meetings if more than one third of Parties object to their presence             |
| <b>Choice</b>      | <b>Prescribe actions to be taken in certain circumstances</b>                                                                                                                                 |
|                    | Parties must submit listing proposals, discuss, and may vote on them; listings are legally binding                                                                                            |
|                    | Dissenting Parties may object to new listing decisions (and thus avoid being bound by them) within 90 days by way of a 'reservation'                                                          |
|                    | Parties may also submit proposals for Resolutions and Decisions and discuss to agree on wording; Resolutions and Decisions are legally non-binding but non-compliance is frowned upon         |
| <b>Aggregation</b> | <b>Determine how many, and which, actors must participate in a given decision</b>                                                                                                             |
|                    | Speaking rights are strongly weighted in favour of Parties                                                                                                                                    |
|                    | Listing decisions must be passed by two-thirds majority if there is no consensus                                                                                                              |
| <b>Information</b> | <b>Authorise channels of information flows</b>                                                                                                                                                |
|                    | Formal agenda items can be submitted by Parties or the Secretariat not less than 150 days before a CoP and not less than 60 days before other Committee meetings                              |
|                    | Information documents may be submitted by Parties, the Secretariat, or observers; they may be referred to but not discussed in meetings and circulation is controlled                         |
|                    | Parties and observers may hold informational side events at meetings but must follow an application process through the CITES Secretariat                                                     |
| <b>Payoff</b>      | <b>Assign rewards or sanctions to particular actions taken or outcomes achieved</b>                                                                                                           |
|                    | Compliant state actors may receive financial and technical support from other Parties and/or multilateral agencies and NGOs                                                                   |
|                    | Non-compliant state actors may be subject to trade sanctions                                                                                                                                  |
|                    | Parties and non-state actors involved in trade typically prefer to avoid listings, due to added costs                                                                                         |
|                    | Parties and NGOs not benefitting from trade may benefit from listings politically and otherwise                                                                                               |
| <b>Scope</b>       | <b>Delimit the range of possible outcomes</b>                                                                                                                                                 |
|                    | Proposals to amend species listing status may succeed or fail; some compromises may be reached via annotations, reservations, and/or stricter domestic measures                               |
|                    | Formal Decisions may prescribe desired short-term outcomes (between meetings); formal Resolutions deal with longer term guidance on implementation of the Convention                          |

Note: Framework adapted from Baldwin et al. (2019).

support of a two-thirds majority of Parties. Information channels are managed by the Secretariat, and payoffs are limited in scope. The range of outcomes specified by the Convention is limited to (i) listings, the effect of which may be modulated by annotations or reservations (or superseded by stricter domestic measures), and (ii) Resolutions and Decisions, being (legally) non-binding directives for Parties to take certain actions.

## 4.2 | Case studies

During the five-year period, several institutional (policy) changes took place with respect to the case study species. At the international (CITES) level, there were no changes to CITES listings (despite 10 attempts, in both directions of easing or tightening trade

restrictions), but two amendments in terms of quotas pertaining to existing listings (for black rhino hunting trophies and captive-bred lion skeleton exports, both for South Africa). There were several CITES Resolutions and Decisions, either amended or newly created, relating to the species, and several instances of stricter domestic trade measures being introduced outside of the Convention (e.g., domestic ivory trade bans and hunting trophy import restrictions), imposed by several Western countries, including the USA.

### 4.2.1 | Elephants

Elephants have been a dominant CITES agenda item throughout the treaty's history and the case study period was no exception. In the wake of evident resurgent poaching in certain regions and building

on the momentum created by the 2014 London Conference, numerous NGOs aligned themselves with a coalition of African countries called the Elephant Protection Initiative (EPI), which took a strong stance against any resumption of legal ivory trade, with strong support from the USA and other influential Parties. At the 17th Conference of the Parties (CoP17) coalition members introduced a pre-print article of a statistical analysis suggesting that the 2008 ivory one-off sale caused an increase in poaching (Hsiang & Sekar, 2016). The methodology of the study (to date, unpublished in the peer-reviewed literature) was contested by CITES-appointed technical analysts, but concern over the effects of resuming legal ivory trade persisted and numerous range state and NGO representatives continued to push for incremental changes to various CITES policy statements to further entrench the trade ban. This included measures to secure and preferably destroy ivory stockpiles and outlaw domestic markets.

Africa's most significant range state, Botswana, initially supported the EPI approach (as a founding member), but after a change in government in 2018 it changed its position to realign more closely with other SADC countries, which favour sustainable use. This change in position was related to the local political unpopularity of the previous policy, which included a domestic ban on trophy hunting that had imposed economic costs and increased human-wildlife conflict in remote rural areas (Mbaiwa, 2018). At both CITES CoP17 and CoP18, there were attempts to modify listings in either direction, but all of these were defeated when put to the vote, leaving the status quo intact, under which the elephant populations of all but four countries remain on Appendix I and the Appendix II countries are subject to a zero quota for ivory trade, against which they are unable to take a reservation. The ivory ban therefore remained intact. At CoP18, the EPI coalition countries succeeded in placing further restrictions on the trade in live elephants, to which Zimbabwe objected, declaring a formal dispute, for the first time in CITES history. The SADC countries, which continue to conserve the largest elephant populations, continued to express high dissatisfaction with the ivory ban.

## 4.2.2 | Rhinos

Rhinos continued to attract attention on CITES agendas during the case study period, mostly as an enforcement issue, in the wake of the post 2007 poaching surge, which started to subside during this time, supported by concerted efforts to tackle illegal trade at all levels of the trade chain. A relatively small and somewhat disjointed group of South African wildlife breeders aligned with the Kingdom of Eswatini, a CITES Party, to campaign for legalisation of rhino horn trade, with two proposals to amend Eswatini's annotated Appendix II white rhino listing at both CoP17 and CoP18. Both proposals attracted some support from SADC countries but relatively little support elsewhere, with most NGOs also opposing legalisation, and the proposals were decisively rejected by vote. At CoP18, Namibia also submitted a proposal to down-list its white rhino population from Appendix I to Appendix II, with a restrictive annotation (that would not allow horn trade but somewhat facilitate export of live animals and hunting

trophies) but this proposal was also defeated in a vote, despite more moderate NGOs believing that it was justified.

Whereas South Africa did not pursue rhino horn trade legalisation, at CoP18 it succeeded in applying for an increased export quota for black rhino hunting trophies. This happened despite strong resistance toward recreational hunting and accompanying international trophy trade of charismatic endangered mammals from a sizable constituency of NGOs aligned with Kenya, in which all such hunting has been banned since 1977. A proposal by a US-based biotechnology company to investigate the feasibility of producing and distributing a synthetic rhino horn substitute received strong resistance from many NGOs and elicited some concern from the Parties, with all arguing that a market release of such substitutes would undermine enforcement efforts and campaigns to reduce consumer demand.

## 4.2.3 | Lions

Whereas lions did not typically feature prominently on CITES and other trade policy agendas prior to the study period, this changed following the 2015 death of Cecil the lion. Prior to that date there had been both growing opposition to recreational lion 'trophy' hunting, especially that supplied by captive breeding, and to the sales to Asian markets of lion skeletons as by-product of such hunts. However, Cecil's death, the vigorous 2016 campaign against the South African captive lion breeding industry, and revelations of widely declining African lion populations (Bauer et al., 2015) raised the profile of lions and led to an attempted CITES Appendix I listing at CoP17 in 2016 (Bauer et al., 2018). The attempt failed but, as a compromise, the Parties agreed to pose a zero quota on trade in lion parts and derivatives (but not hunting trophies) on all countries except South Africa, which was mandated to set an annual quota of skeletons to be provided from captive sources.

Following this decision, a coalition of South African and international activists and NGOs continued to campaign for the termination of South Africa's captive lion breeding industry and all activities associated with it, notably put-and-take 'trophy' hunting and the lion skeleton export trade, including at subsequent subsidiary CITES meetings. In South Africa, seeking public input for the quota-setting decision, the authorities were presented with two extreme positions (and no middle ground) with the breeders seeking very generous quotas and the opposition coalition motivating for a permanent zero quota. A 2016 US decision to list the African lion on the Endangered Species Act had resulted in new restrictions on lion trophy imports (an effective ban on captive-sourced lion trophies) and severely impacted the South African industry, given that US hunters accounted for the large majority of their clients. In response, several breeders sought alternative income sources by further pursuing the skeleton export market, with some euthanizing all their lions (Williams & t Sas-Rolfes, 2019). The opposition coalition then sued the South African government, winning a judgement in 2019 to suspend the lion skeleton export quota on animal welfare (not conservation) grounds. Skeleton exports remained a contentious issue during the subsequent

policy review process, with the coalition lobbying strongly against their resumption, and succeeding (DFFE, 2020).

### 4.3 | Common features

Whereas each case has some unique features, some common trends of actor behaviour became evident. In each case, there were strong coalitions of NGOs that opposed all forms of commercial trade in wildlife products, as well as the import of hunting trophies and even trade in synthetic substitute products. Prominent groups within these coalitions included the Humane Society (HSI) and Born Free Foundation (BFF), which both have a strong animal welfare orientation, and the Environmental Investigation Agency (EIA), which opposes legal trade of these species on grounds that it stimulates demand and complicates enforcement. These NGOs aligned with and supported like-minded Parties, notably Kenya and several West African countries, to oppose attempts by SADC countries to maintain or ease legal trading arrangements. The Parties concerned, in which historical habitat loss has been severe and only residual numbers of the subject species survive (if at all) typically face different conservation challenges to the SADC countries, where the greatest concerns are ongoing habitat conversion and human-wildlife conflict in rural areas. Significantly, these coalitions adopted a 'confrontation' (winner takes all) strategy in pursuit of a clear prohibition outcome and were observed to curate and present evidence to support their positions.

Opposing these campaigns, a relatively small number of special interest groups sought to defend the maintenance of trading opportunities or even expand them, with support from SADC countries and other Parties more pre-disposed toward sustainable wildlife use. However, the 'sustainable use' alliance appeared fractured into specific items of interest, with the strongest being the maintenance of recreational hunting and trophy trade, receiving support from large groups such as Safari Club International, the Dallas Safari Club, and the CIC, which has an elevated intergovernmental status at CITES meetings. Private wildlife ranchers are confined to relatively few countries, notably South Africa and Namibia, and do not form a substantial constituency with international reach. They therefore need to rely on their own governments to act in their interests and face the challenge of domestic opposition as well as international. Although these special interest groups are also outcome-oriented, the Parties that support them are more likely to adopt bargaining (compromise) strategies at CITES, referring to conservation and economic benefits to support their positions. Although the groups themselves also claimed such benefits in their representations, they typically failed to provide substantial supporting evidence, apparently lacking the resources and will to do so.

With some variability between specific issues, numerous Parties and some more centrist NGOs played a different role in CITES deliberations, weighing up evidence from both sides and more likely to adopt a bargaining (compromise) strategy. The USA and EU often fell into this category, as did NGOs such as WWF International and TRAFFIC. They would typically seek evidence but place greater

weighting on scientific evidence of conservation status and impacts than on economic benefits, with the IUCN playing a unique role in focusing mainly on providing the former through its taxonomic specialist groups. As an additional category, several NGOs undertook specific activities such as demand reduction campaigns or undercover investigations to find and expose illegal activity, with some NGOs specialising in such activities alone (e.g., WildAid, EIA). For such specialised actors, their strategies were outcome-driven toward their focus of interest (moral suasion or enforcement rather than conservation impacts) and they would confront rather than bargain, using evidence selectively to support their positions (confirmed by Somerville, 2017).

Table 3, below, represents an adapted presentation of the results of t Sas-Rolfes and Gooden's (2024) study on non-state actors' official stances toward seven thematic trade policy issues. The 14 listed actors were active both in CITES meetings and in a domestic policy consultation in South Africa. The actors are presented in loosely descending order of stature and influence, based on a selection of attributes that includes apparent constituency size, international spread, budget, media reach, and other relevant factors. While not definitive, this sequencing provides a useful indication of the landscape of interests and positions, revealing the somewhat more nuanced and neutral views of the first three organisations, followed by the strongly prohibitionist stance of the next layer, with domestic special interest groups that favour trade at the bottom. It also indicates that trophy trade and synthetic products trade remained as outlier issues, with the former still enjoying broader support than other forms of trade, and the latter not, likely due to its novelty and ambiguous role.

In institutional terms, the most obvious trends were for non-state actors to cluster and collaborate in pursuit of simplified trade policy objectives, seeking and achieving either restrictions (mostly) or easing (rarely, and without success) as an outcome. In contrast, state actor approaches were more varied, with many CITES Parties adopting a passive stance to agenda items that did not concern them but becoming more visibly more engaged when lobbied by special interests (including NGOs and aligned Parties). Relatively few Parties adopted a 'guiding' strategy on issues (as per Woldendorp & Keman, 2010), notably the USA and specific African countries (the latter, mostly with strong visible NGO support if they opposed trade). The EU tended to adopt a 'congruent' strategy, playing a critical role in determining policy because of its voting block power. Non-institutional outcomes were quite limited, with the most striking being the immediate and significant economic impact of the USA lion trophy restrictions on South African lion breeders, and the less obvious being the frustration of SADC country aspirations to resume trading in elephant ivory and rhino horn.

### 4.4 | Diagnostic overview

We now consider the case study observations in the light of our CITES rule framework and institutional diagnostic analysis. Our analysis suggests that the rules tend to entrench the established positions and interests of certain privileged Parties (e.g., USA, EU) and large

**TABLE 3** Trade policy stances of key non-state actors.

| #  | Organisation      | Scale | Interest | Position    | Orientation                    | Species | Trade issue themes |   |   |   |   |   |   | Advocacy/<br>Evidence |       |
|----|-------------------|-------|----------|-------------|--------------------------------|---------|--------------------|---|---|---|---|---|---|-----------------------|-------|
|    |                   |       |          |             |                                |         | 1                  | 2 | 3 | 4 | 5 | 6 | 7 |                       |       |
| 1  | WWF               | I     | Indirect | NS1         | Environmental conservation     | E R L   | V                  | V | V | V | V | S | V | A                     | E1    |
| 2  | TRAFFIC           | I     | Indirect | NS1         | Wildlife trade monitoring      | E R L   | V                  | V | V | V | V | S | V | A                     | E1 E2 |
| 3  | IUCN              | I     | Public   | H           | Environmental conservation     | E R L   | V                  | V | V | V | V | S | V |                       | E1    |
| 4  | HSI               | I     | Indirect | NS2         | Animal welfare                 | E R L   | O                  | O | O | O | O | O | O | A                     | E2    |
| 5  | BFF               | I     | Indirect | NS2         | Animal welfare                 | E R L   | O                  | O | O | O | O | O | - | A                     | E2    |
| 6  | EIA               | I     | Indirect | NS2         | Compliance & enforcement       | E R L   | O                  | O | O | O | O | V | O | A                     | E2    |
| 7  | CIC               | I     | Indirect | NS2/<br>IGO | Hunting & conservation         | E R L   | V                  | V | V | O | - | S | - | A                     | E1    |
| 8  | Panthera          | I     | Indirect | NS2         | Species conservation           | L       | V                  | V | O | O | - | S | V | A                     | E1    |
| 9  | WAP               | I     | Indirect | NS2         | Animal welfare                 | L       | O                  | O | O | O | O | O | - | A                     | E2    |
| 10 | EWT               | N     | Indirect | NS3         | Species conservation           | E R L   | V                  | V | V | O | V | V | - | A                     | E1    |
| 11 | EMS<br>Foundation | N     | Indirect | NS3         | Animal welfare                 | E R L   | O                  | O | O | O | O | O | - | A                     |       |
| 12 | WRSA              | N     | Direct   | NS4         | Wildlife ranching              | E R L   | S                  | S | S | S | S | S | - | A                     |       |
| 13 | SAPA              | N     | Direct   | NS4         | Private captive breeding       | L       | S                  | S | S | S | S | S | - | A                     |       |
| 14 | PROA              | N     | Direct   | NS4         | Wildlife ranching/<br>breeding | R       | S                  | S | S | S | S | S | - | A                     |       |

**Note:** **Organisation** names have mostly been abbreviated – see S4 for full names. **Scale** is classified as: **International** – operating in multiple national jurisdictions. **National** – operating countrywide in a single national jurisdiction. **Interest** is classified as: **Direct** – direct legal ownership and/or control of wildlife and/or habitat. **Indirect** – no ownership but representing a particular constituency with a special interest. **Public** – representing official state interests in whole or in part. **Position** is classified as: **NS1** – Large international NGO, broad constituency. **NS2** – Medium-sized international NGO, narrower constituency. **NS3** – National or domestic NGO. **NS4** – National producer or trade association. **IGO** – Intergovernmental organisation. **H** – Hybrid organisation (state and non-state constituents). **Orientation** refers to the apparent core interest of the organisation. **Species** of interest are **Elephants, Rhinos, and Lions**. **Trade issue themes** are taken from t Sas-Rolfes and Gooden (2024) and are as follows: **1** Extraction from the wild; **2** Product consumption; **3** Physical commercial trade; **4** Commercial captive breeding; **5** Stockpiles of body parts; **6** Hunting trophy trade; **7** Imitative substitute products. The three trade stances have been shaded for easy identification, with **Oppose** shaded darkest, **Varying** lighter, and **Support** unshaded; a dash signifies no stated position, and these have also been shaded lighter grey as this does not necessarily signify support. **Evidence** is classified as follows: **E1** Provision of scientific evidence related to conservation outcomes. **E2** Provision of evidence related to legal violations and/or ethically contested practices. **Source:** Adapted from t Sas-Rolfes and Gooden (2024).

NGOs, and largely exclude the voices of critical constituencies such as local rural people and product consumers. Domestic producers such as wildlife ranchers are also disadvantaged. The pulsed and constrained flow of information adversely affects rapid and flexible policy-making, inhibiting adaptive management. The scope rules tend to frame commercial trade as a threat with limited flexibility around restrictive policy measures, and the aggregation rules accompanied by the dual Appendix listing system tend to simplify most issues down to a largely polarised trade versus no trade debate. For the case study species, the only trade types that could prevail under CITES were exemptions for hunting trophies, lion skeleton exports from captive animals and some domestic ivory markets; however, even these activities were placed under further pressure from anti-trade coalitions, including some Parties seeking to exert influence outside of the CITES remit.

With official payoffs limited in scope, the mostly passive stance of state actors affirmed that are likely to act only so far as they are

lobbied and financially incentivised, either by domestic business interests or by external actors such as bi-lateral or multi-lateral aid agencies and NGOs (or alternatively, by threat of financial loss through more generalised trade sanctions). Enforcement (from protected areas to border customs controls) is costly and there are strong incentives to free ride. There is apparent flexibility in trade policy outcomes, but the scope of trade policy is essentially very narrow, with most measures either facilitating it or inhibiting it. NGOs are visibly incentivised to promote up-listings and other trade restrictions so that they can claim victory and credit for achieving greater levels of protection (Challender & MacMillan, 2019) and will do so even outside of the remit of the Convention (by way of promoting stricter domestic measures).

Further applying a detailed diagnostic checklist to the CITES regime, we can make the following observations (see S2 for further details). CITES provides a vehicle for actors to pursue multiple and conflicting objectives in a complex dynamic global system. Whereas

some actors pursue conservation goals as broadly defined by international policy (e.g., IUCN et al., 2013; the United Nations Sustainable Development Goals), others are driven by a focus on the welfare of individual animals or ideological opposition to trade in wild animals and their body parts. The threat of unsustainable harvest for trade is unevenly spread and in the countries that have successfully conserved the greatest numbers, it is relatively low (with the recent exception of rhino poaching in South Africa). The systemic threats are also cumulative and long-term, requiring adequate administrative capacity and funding, which in many cases does not exist. Trade policy is only in part a collective action problem, affected by value conflict and high potential externalities, and requires both coordination and collaboration.

Actors in the regime are highly heterogeneous and variously motivated by rationality and legitimacy concerns; there is a high degree of cultural heterogeneity, economic inequality, and asymmetry in political power. Illegal trade is facilitated by high levels of corruption, signalling that trade restrictions widely lack social legitimacy. There are also significant asymmetries in capacity and the actions of the numerous subject actors (poachers, traffickers, and consumers) are concealed, calling for costly monitoring procedures. For all case study species there are substantial knowledge gaps, and although these vary between species, the existence of these gaps also creates uncertainty regarding options and probable consequences, leading to calls for the use of a 'precautionary' approach as a stop-gap option, which many actors seek to interpret in favour of restricting trade (Dickson, 1999).

## 5 | DISCUSSION

CITES has existed for some five decades and evolved substantially as a treaty, growing in membership and complexity. It is, however, unclear that the conservation status of the case study species has improved markedly. Elephants and rhinos remain threatened by poaching in many parts of their range and CITES is unable to address the effects of human encroachment on habitat that largely threatens elephants and lions. Attempts by southern African countries to partly address this latter threat by exploring trade options to finance and otherwise incentivise local conservation efforts are thwarted by the external imposition of trade restrictions. Whereas in the past CITES appeared to play a constructive role in reversing the fortunes of threatened species such as the South American vicuña and crocodilians through the fostering of legal and sustainable trading mechanisms, the evolution of the Convention has created conditions less favourable to applying such solutions to the case study species (Cooney et al., 2021).

The issues that actors attempt to address through wildlife trade policy have the characteristics of a wicked environmental problem, calling for a significantly adaptive approach (Norton, 2005). However, analysis of the three case studies suggests that, at least for these charismatic flagship species, CITES may be facilitating the evolution of a global prohibition regime, rather than acting as a trade regulation regime (see Nadelmann, 1990; Princen, 1994). The strategic vision of

the coalitions opposed to trade appears to be shaped by an ideological 'animal protection' narrative (t Sas-Rolfes & Gooden, 2024) and this movement seeks complete prohibition of all physical commercial trade activities relating to the case study species, including trophy hunting bans and continued suppression of all physical markets for animal products such as ivory, rhino horn, and lion parts, which includes banning domestic markets, synthetic substitutes, commercial captive breeding, and most live animal trade, and destroying existing stockpiles of products.

Opposing the animal protection movement is a disparate set of smaller interest groups and a few countries attempting to defend or promote niche activities such as sales of lion parts, ivory, rhino horn, hunts with permitted trophy exports, and synthetic products. They receive some support from sympathetic state actors and some mainstream non-state actors such as large centrist NGOs, all of whom must nevertheless represent all their constituents in a context of sociocultural values that appear to be shifting away from wildlife harvesting and trade in wealthier urbanising countries (Manfredo et al., 2020). In this context, the animal protection narrative appears compelling and to hold moral high ground, providing growing public leverage to the actors that support it.

Given that CITES appears to remain structurally dominated by Parties and NGOs that are Western, wealthy, and urbanised, actors that support niche trading interests are vulnerable to speculative attacks from well-resourced animal protection coalitions, who view CITES up-listings and other trade restrictions as virtuous victories and can sell them as such to their constituencies. These coalitions employ a broad strategy of confrontation rather than bargaining, playing uncompromising winner-takes-all politics to lobby for policy and legal change, often accompanied or followed by litigation against state actors in the wildlife sector. They invoke moral philosophical arguments linked to the intrinsic value of wild animals to gain academic leverage and their tactics include shaming detractors (Fine, 2019), supporting directionally motivated scientific research in the absence of good data on conservation impacts (Hiller & 't Sas-Rolfes, 2024; Meyer et al., 1997) and undercover investigations to expose illegal activity, which provides evidence to suggest that trade cannot be controlled.

Global trade restrictions tend to result in resistant infractions, especially given significantly inadequate levels of CITES implementation and enforcement (Wyatt, 2021), and these then provide further opportunities to identify illegal activity. The added uncertainty and complexity in the system provides a basis to argue for further restrictions as a 'precautionary' approach. The interpretation of precaution as an embedded principle within CITES is a hotly debated topic (Janssens & Trouwborst, 2018; 't Sas-Rolfes et al., 2019). Whereas CITES Resolution 9.24 on species listing criteria adopts neutral wording, in practice CITES listing and other decisions reflect that the Parties tend to prefer tightening trade restrictions in the face of uncertainty (Trouwborst et al., 2019). This tendency was again reflected in South Africa's recent decision to capitulate to demands to ban lion skeleton exports, despite evidence of adequate traceability mechanisms for legal export trade (Williams et al., 2021) and that restricting

output from wildlife farming operations risks inducing feedback effects that ultimately negatively impact wild populations (Rieder et al., 2021).

As revealed by the rule framework and institutional diagnostic analysis, the CITES structure creates significant obstacles for commercial interests in developing countries, which nevertheless may be responsible for conserving the greatest numbers of the subject species. Orenstein et al. (2022) argue that benefits from commercial trade seldom benefit previously disadvantaged communities; however, these obstacles require substantial and coordinated collective action to overcome and without prospects of future economic opportunities there are limited incentives to build the necessary institutional and capacity for the future fair distribution of benefits. What are the consequences for conservation and how does that reflect on the effectiveness of the treaty? At its core, and according to its most recent Strategic Vision articulated in Resolution 18.3 (CITES, 2019), CITES is intended to support conservation of wild species and the welfare of captive live animals in transit, but not the rights of individual animals in the wild. However, examining the inherent nature of the three case study species issues points to problems.

In the case of elephants, the problem is one of heterogeneous needs across range states and unevenly distributed costs and benefits. Recent research suggests that elephant poaching is relatively inelastic, and that trade policy alone may not be as significant a factor as previously assumed (see Do et al., 2020; Kuiper et al., 2023; Lopes, 2015). The ivory ban perversely penalises a few countries for conserving high numbers of elephants by denying them income opportunities while imposing upon them additional management costs (which may include extensive long-term damage to natural habitat if elephant numbers are not controlled), while benefitting virtue-signalling actors and the greater number of countries with small elephant populations, without adequate compensation for the externality. This amounts to a free-rider problem. Recent initiatives linked to CITES elephant policies include raising the profile of animal welfare beyond transportation and calling for domestic trade bans, both of which are beyond the remit of the treaty and amount to 'mission creep' (Einhorn, 2001).

Further questionable initiatives include the framing of illegal ivory trade as a global security issue, with now largely disproven claims of links to terrorist organisations, an initiative that appears to be linked to other political agendas (Duffy, 2022; Massé & Margulies, 2020). Other related initiatives that lack evidential support of conservation benefit include the promotion of stockpile destruction (Biggs, 2016) and action to restrict mammoth ivory trade and leakage of old ivory stocks from Japan to China, with economic research suggesting that the former may be suppressing consumer prices in China (Farah & Boyce, 2019), which, by implication may be true of the latter too.

In the case of rhino conservation, given that consumer demand for horn appears highly persistent, the trade ban appears to have locked in a reinforcing detrimental feedback effect, whereby as the species become increasingly rare, the illicit market value is raised, increasing incentives for crime and corruption (see Di Minin et al., 2022). The net consequence of this effect could be to doom rhinos to be trapped in a 'poaching pit,' that is, at low population

numbers from which the only exit might be a combination of intensive breeding in heavily secured areas and trade legalisation, which continues to be opposed for values-based reasons. Recent NGO-driven initiatives to constrain intensive breeding operations in South Africa and restrict live rhino exports to approved 'appropriate and acceptable destinations' also extend outside the intended scope of CITES. In the case of lions, extending the logics of trade restriction to products sourced from captive animals (otherwise widely used for other species—see Harfoot et al., 2018) also extends beyond the remit of CITES, especially given a paucity of evidence that these activities pose a serious threat to wild populations.

What do these observations imply about the overall effectiveness of the CITES regime?

Young (2018) proposes three aspects of regime effectiveness, namely constitutive (assigning roles to and settling disputes between actors), generative (identifying problems and formulating agendas), and goal-setting (steering toward goals as opposed to being confined by inflexible rules). For the case study species, we conclude as follows. First, in terms of constitutive effectiveness, CITES appears to be defective insofar that the essentially polarised listing system (Appendix I prohibitions versus Appendix II regulated legal trade) entrenches rather than resolves policy conflict between Parties with varying interests and ideologies. Being based on a majority voting system it incentivises ideologically-motivated prohibitionists to pursue a winner takes all political strategy through confrontation and lobbying rather than compromise. Second, in terms of generative effectiveness, CITES risks diagnosing problems with multiple causes (e.g., habitat conversion and illegal killing driven by broader economic factors) as being solvable by a one-dimensional trade restrictive solution that can in some case aggravate the other factors. Finally, in terms of goal-setting effectiveness, by tending to approach trade as a blanket global threat rather than focusing on adaptable solutions to site-specific challenges, CITES arguably facilitates goal displacement, away from 'conservation' as defined by the IUCN's World Conservation Strategy (IUCN, 2013) and toward 'protection' of individual animals through blanket global measures.

## 6 | CONCLUSION

We investigated the effectiveness of the CITES regime through a specific lens of evaluating how the treaty shaped actor behaviour in relation to charismatic African megafauna. We examined the CITES rules in a structured way (through the IAD framework), applied dynamic institutional analytic tools to examine actor behaviour over a five-year period, and then further applied institutional diagnostics to the case study material. This approach enabled us to gain insight into the limitations of CITES, both as a treaty and a broader regime to frame wildlife trade policy for the purposes of conserving substantial populations of threatened African megafauna species within their natural habitat across a complex variety of landscapes and contexts. Our results highlighted the risk of CITES becoming a vehicle for coalitions of well-resourced non-state actors to game the rules in pursuit of

objectives outside of the assumed foundational conservation remit of the treaty, with potentially adverse long-term consequences.

Whereas global governance in other domains such as water management are changing to recognise complexity (Pahl-Wostl, 2017), for the case study species CITES appears to suffer from institutional lock-in (Bogers et al., 2022) and a 'freeze-framing effect' (Wandesforde-Smith, 2015), unable to coordinate effectively with the more flexible regime of the Convention on Biological Diversity (Sand, 2016; Velázquez Gomar, 2016; Velázquez Gomar et al., 2014) and at risk of becoming a victim of dynamic institutional 'diversion' similar to the regime for whales and whaling (Couzens, 2013b; Young, 2010). Whereas Couzens (2013a, 2013b) recommends a 'reverse listing' approach to reform CITES, we agree with Sand (2016) that this approach is problematic and impractical, failing to address many of the concerns we have raised. We therefore recommend policy reform to increase the flexibility of CITES with better recognition of the practical implications and incentive drives resulting from the multiple and oft-conflicting objectives of different actors. This could take the form of a possible move away from the polarising Appendix-listing system, toward one that enables and incentivises the development of more tailored localised solutions that can employ certified, traceable, and sustainable trading arrangements to supplement their financing options beyond dependence on aid and potentially fickle tourism markets (see Lindsey et al., 2020).

The findings of this study are supported by past research raising concerns about CITES effectiveness (e.g., Cooney et al., 2021; Curlier & Andresen, 2002; Duffy, 2013; Epstein, 2006; Wandesforde-Smith, 2016) and complemented by recent research that adopted a different approach (Challender et al., n.d., submitted paper). However, having focused on specific case studies of dangerous charismatic African megafauna, and furthermore focused on policy dynamics mostly within one country, South Africa, the results of this study have potential limitations. South Africa represents an outlier with its extreme extent of commodification and intensive management of rhinos and lions, but nevertheless provided a useful lens to analyse actor strategies through a dynamic institutional lens. The results of this research suggest that broader analyses of other species and jurisdictions may be worth pursuing to gain further insight on the treaty's overall effectiveness in shaping global conservation governance. Our results also point to significant research gaps in terms of empirically established causal links between trade policy interventions and species conservation outcomes.

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## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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