Preventing poaching: innovative strategies in the fight against wildlife crime

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Mini dissertation accepted in partial fulfilment of the requirements for the degree *Master of Laws in Environmental Law and Governance* at the North-West University

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Graduation: July/August 2023

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ABSTRACT

The purpose of this study is to explore possible innovative law and policy strategies to address and ultimately prevent rhino poaching in South Africa.

It is evident from the available research that a magnitude of anti-poaching efforts is available to address wildlife crime, ranging from the use of technology to conservation husbandry. However, despite the Skukuza court having a 99% conviction rate for poaching cases, statistics show that poaching continues unabated. The reason for this is that so-called 'foot soldiers' (who are easily replaceable) are the ones being sentenced and imprisoned, instead of the masterminds behind the organised crime networks.

The illegal trade in wildlife will keep rhinos on the brink of extinction if we fail to find proper strategies to address the key driving forces behind poaching, namely inadequate law enforcement, legal uncertainty around property rights, and human-wildlife conflict. There is also a great need for the disruption of organised crime and strategies to address past and present social injustices against communities that are vital in the fight against wildlife crime.

Keywords: Wildlife crime, organised crime, poaching, illegal trade, wildlife trafficking

OPSOMMING

Die doel van hierdie studie is om moontlike innoverende regs- en beleidstrategieë vir die hantering en uiteindelike voorkoming van renosterstropery in Suid-Afrika te ondersoek.

Dit blyk duidelik uit die beskikbare navorsing dat daar ’n wye verskeidenheid teenstroperymaatstawwe beskikbaar is om wildlewemisdaad aan te spreek. Dit strek van die gebruik van tegnologie tot bewaringsboerdery. Ten spyte van die feit dat die Skukuza hof ’n 99% skuldigbevindingsyfer in stropery sake het, wys die statistieke egter dat stropery onverpoosd voortgaan. Die rede hiervoor is dat sogenaamde ‘voetsoldate’ (wat maklik vervangbaar is) die persone is wat gevang en gevonnis word, in plaas van die meesterbreine agter die georganiseerdemisdaadnetwerke.

Die onwettige handel in wildlewe sal aanhou om renosters op die randjie van uitsterwing te laat wankel as ons nie behoorlike strategieë ontwikkel om die dryfkragte agter stropery aan te spreek nie. Hierdie dryfkragte sluit in onvoldoende wetstoepassing, regsonsekerheid rondom eiendomsregte, en mens-wildlewe konflik. Dit is dringend nodig dat georganiseerde misdaad ontwrig word en dat stappe geneem word om vorige en huidige sosiale onregte teen gemeenskappe wat sentraal is in die geveg teen wildlewemisdaad, aan te spreek.

Sleutelterme: Wildlewemisdaad, georganiseerde misdaad, stropery, onwettige handel, wildlewehandel

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LIST OF ABBREVIATIONS (TOC_HEADING)

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoP	Conference of Parties
CPA	Criminal Procedure Act, 51 of 1977
EMI	Environmental Management Inspectorate
GDP	Gross Domestic Product
LEAP Strategy	SADC Law Enforcement and Anti-Poaching Strategy
NEMA	National Environmental Management Act, 107 of 1998
NEMBA	National Environmental Management: Biodiversity Act, 10 of 2004
NEMPAA	National Environmental Management Protected Areas Act, 57 of 2003
NISCWT	National Integrated Strategy to Combat Wildlife Trafficking
POCA	Prevention of Organised Crime Act 121 of 1998
SADC	Southern African Development Community
SAPS	South African Police Service
SARS	South African Revenue Service
TOPS	Threatened or Protected Species Regulations
WWF	World Wide Fund for Nature

Chapter 1
Introduction

1 Heading 1 won't print! Deleting will result in incorrect numbering

There has long been a strained relationship between the local communities surrounding conservation areas and the rhinos that should be conserved. An article by Hübschle and Shearing illustrates this tension with two quotes. On the one hand, a member of the Save the Rhino Trust in Namibia praises the importance of rhinos as part of the economy and for job creation, and on the other hand a community member who participated in a focus group at the Kruger National Park says that rhinos have their own doctors, security guards, land and rangers, and that should the rhino go extinct, perhaps poor community members will gain access to these benefits.[1] There is a battle of resources: conservation versus poverty, conservation versus poaching in order to survive, conservation versus ownership rights… One can sympathise with local communities who once had access to the benefits of natural resources and now live on the outskirts of these areas for conservation's sake.

The strained relationship between communities living in destitution and rhinos on the brink of extinction plays a crucial role in the fight rhino poaching on the one hand, and the fight to develop economic opportunities on the other.

One of the greatest environmental challenges South Africa is facing today is undoubtedly the race to save the rhino. Although there is a plethora of international and domestic restrictions on trade and many proactive anti-poaching initiatives, the fact that illegal wildlife trade continues, confirms that wildlife crime is a highly profitable undertaking.[2] One of the primary international instruments regulating the trade of endangered wildlife is the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). All parties to the convention are required to give effect to the agreement's provisions in domestic law.[3] Regional

1 Hübschle and Shearing 2018 *Global Initiative Against Organized Crime* 2.
2 Ayling 2013 *Journal of International Wildlife Law and Policy* 58
3 CITES date unknown https://cites.org/eng/disc/parties/chronolo.php.

agreements and treaties between neighbouring countries in Southern Africa is just as important when it comes to curbing poaching, since these agreements can be specific and geopolitically informed. Regional cooperation to curb illegal wildlife trafficking is envisaged in the African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa.[4] There is a magnitude of legislation in African countries determined to regulate the protection of indigenous fauna and flora.

Notwithstanding this, implementation remains a challenge as African countries often lack the necessary financial means (and sometimes political will) to enforce these laws.[5] Regional cooperation between African states is of the utmost importance when tackling the issue of poaching as it is often a transnational crime. It is well documented that access from Mozambique into the Kruger National Park is quite easy and that suspected poachers released on bail have at times fled to Mozambique. Lucky for them, there is no extradition treaty between South Africa and Mozambique.[6]

Fundamentally, the Constitution of the Republic of South Africa is the foundation based on which we can take reasonable measures to ensure ecologically sustainable development and the sustainable use of natural resources.[7] Examples of more generic legislation in South Africa that can potentially regulate aspects of poaching include the Criminal Procedure Act 55 of 1977, the International Cooperation in Criminal Matters Act 75 of 1996 and the Prevention of Organised Crime Act 21 of 1998. Moreover, the National Environmental Management: Biodiversity Act 10 of 2004 places a duty on the state to manage, conserve and sustain biological diversity and genetic resources.[8] There are, however, pitfalls and areas that can be amended to further strengthen the legal framework combatting wildlife poaching. Still, as shown above, rhino poaching continues to thrive in South and southern Africa. This

4 African Strategy on Combating Illegal Exploitation and Illegal Trade in Fauna and Flora in Africa part II, a 2.4 (2015).
5 Erinosho 2013 *African Journal of International and Comparative Law* 379.
6 Collins 2020 *European Journal of Law and Economics* 369.
7 S24(b)(iii) of the Constitution of the Republic of South Africa, 2016.
8 S3 National Environmental Management: Biodiversity Act, 2004.

dissertation aims to explore the rhino crisis by answering the following research question: How can law and policy be applied innovatively to curb poaching?

The aim in answering the question above is to identify gaps and possible opportunities to improve the legal framework used to address poaching. Hereunder follows a breakdown of the chapters and sub-questions to be addressed in each chapter.

Chapter 2 provides a brief overview of the rhino poaching crisis and highlights the importance of protecting biodiversity and conservation. Chapter 3 identifies the key driving forces behind poaching that are within South Africa's control. Chapter 4 critically reflects on the current anti-poaching strategies. Chapter 5 evaluates the requirements and principles of the current legal framework to identify gaps and missed opportunities to address the poaching dilemma. Chapter 6 analyses and applies innovative strategies to curb poaching. Chapter 7 concludes by offering recommendations on the issue.

Chapter 2
An overview of the fight against rhino poaching and the importance of protecting biodiversity and conservation

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1.1 Introduction

Before answering the question of how the law can be applied innovatively to curb poaching, Chapter 2 provides context on how the rhino poaching crisis came to be and how it continues. After this, the discussion will highlight the importance of conservation and the protection of biodiversity. Firstly, this study looks at the reasons behind the demand for rhino horn. Secondly, the discussion reflects on the local drivers that fuel rhino poaching. Thereafter we explore the continued resilience of criminal networks. This is important, as criminal networks have to be disrupted to stop wildlife trafficking.

The chapter then turns to the importance of biodiversity. Understanding why it is important to save the rhino is paramount, as it links with other issues, such as healthy ecosystems, cultural heritage, tourism, creation of jobs, economic development, the alleviation of poverty in rural communities and general respect for the law. The final section offers a summary of the chapter.

1.2 The importance of biodiversity

South Africa is one of 17 megadiverse countries in the world, and the 3rd most biodiverse country overall.[9] More diversity means a broader variety of life.[10] The more we destroy and pollute our ecosystems, the less diverse it will become. This will

[9] Lombard 2016 https://www.news24.com/news24/travel/international-biological-diversity-day-ost-biodiverse-place-on-earth-20160523.

[10] Lombard 2016 https://www.news24.com/news24/travel/international-biological-diversity-day-why-sa-is-the-3rd-most-biodiverse-place-on-earth-20160523.

inevitably lead to species extinction and the subsequent collapse of healthy ecosystems. Biodiversity sustains life – it is therefore of the utmost importance to conserve our natural environment and all species in it.

1.2.1 Healthy ecosystems

The ordinary citizen without a broad knowledge of natural sciences or biology may find it hard to grasp why it will be catastrophic should the rhino go extinct. It will of course be devastating for future generations who want to see a live rhino. But other than that, does it really matter? Many species have gone extinct in the past and many more will go extinct in the future. Some species have a bigger influence on their habitat than others.[11] Elephants and wolves, for example, are keystone species. Elephants are known ecosystem engineers.[12] By destroying trees and stumping on shrubbery, they keep forests from expanding into open grasslands. Wolves on the other hand, are key in managing herbivores (like deer). Should herbivores be allowed to graze without restriction, it will have (as it has in Yellowstone Park) disastrous effects on plant life.[13] Cromsigt and Te Beest (2014) explored the importance of rhinos in their role as ecosystem builders. The study relied on a 'recolonisation experiment', which measured the difference in landscapes between previous and current populations and their movement in the Kruger National Park.[14] Megaherbivores (such as rhinos and elephants) have a significant impact on their surrounding ecosystems.[15] They found that in the areas affected most by rhino activity, the number of lawns and diversity of short grass was higher compared to the areas not frequented by rhinos.[16] More diversity and more grazing lawns mean that other species, like zebra and gazelle, also have an abundant food source.[17] However,

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11 Nuwer 2014 https://www.smithsonianmag.com/articles/heres-what-might-happen-local-ecosystems-if-all-rhinos-disappear-180949896/.

12 Raj 2008 *Resonance* 648.

13 Nuwer 2014 https://www.smithsonianmag.com/articles/heres-what-might-happen-local-ecosystems-if-all-rhinos-disappear-180949896/.

14 Cromsigt and Te Beest 2014 *Journal of Ecology* 566.

15 Hyvarinen *et al* 2021 *Ecography* 1580.

16 Cromsigt and Te Beest 2014 *Journal of Ecology* 569.

17 Nuwer 2014 https://www.smithsonianmag.com/articles/heres-what-might-happen-local-ecosystems-if-all-rhinos-disappear-180949896/.

it is impossible to predict exactly how far the consequences of rhino extinction will reach, though it's safe to presume that the African savannahs will look very different.[18]

1.2.2 Cultural heritage

Rhinos are classified as one of the Big 5 in South Africa. Saving the rhino is not only important for healthy ecosystems and economic opportunities (as discussed below), but they are also part of our cultural heritage. If a nation, or the globe for that matter, cannot unite to save this remarkable species, what hope do we have to save ourselves?[19] In this context, Gandhi remarked that, '[t]he greatness of a nation and its moral progress can be judged by the way its animals are treated.'[20] Scientists have long been studying the cultural significance of biodiversity. A study specifically related to the use of wild plants for medicine in the Eastern Cape province of South Africa, clearly shows that biodiversity plays a role in cultural (including spiritual and religious) needs.[21]

A landmark case concerning cultural heritage is the recent Shell-case.[22] Following Shell's application to conduct seismic surveys off the east coast of Southern Africa, various communities and institutions brought interdicts to halt Shell's plans. Paragraph 14 of the case sheds light on the Amadiba traditional community's deep cultural and spiritual relationship with the sea and their belief that some of their ancestors reside in the sea.[23] The judge in the case reiterated that even though not everyone understands the affected community's special relationship with the sea, it is

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18 Nuwer 2014 https://www.smithsonianmag.com/articles/heres-what-might-happen-local-ecosystems-if-all-rhinos-disappear-180949896/.

19 Atkins *et al* 2018 *AAAJ* 684.

20 Peta date unknown https://www.peta.org/features/ghandi/.

21 Cocks and Dold 2006 *Journal of Ethnobiology* 60.

22 *Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2021] ZAECGHC 118; [2022] 1 All SA 796 (ECG); 2022 (2) SA 585 (ECG) (28 December 2021)

23 *Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2021] ZAECGHC 118; [2022] 1 All SA 796 (ECG); 2022 (2) SA 585 (ECG) (28 December 2021) par 14.

to be accepted that different beliefs and practices exist.[24] There is an interconnected relationship between section 24 of the Constitution, envisaging an environment that is not harmful to health and wellbeing, and protecting the environment for the benefit for present and future generations and section 31, the right to practice one's culture and beliefs. The rhino is an inherent part of South African culture and protecting the rhino from extinction is both a cultural and environmental issue. To illustrate: for centuries the Bantu-speaking peoples in South Africa regarded the black rhino as significant – the Mapungubwe gold rhino was a symbol of sacred leadership.[25]

1.2.3 Tourism

The Kruger National Park covers around 19 000 square kilometres and protects biodiversity.[26] Each year almost 1 million tourists visit the park. Eighty per cent of these are South African nationals.[27] Wildlife tourism is a wonderful opportunity for countries to grow their economies.[28] In South Africa, especially, the financial injection into parks and the rural communities involved in conservation can lead to better livelihoods. The rhino is part of the famous Big 5 (alongside the lion, leopard, elephant and buffalo). Sources note that the Big 5 is a major drawcard for tourists planning a safari. It is estimated that wildlife tourism might decline by 20% should one of the Big 5 species go extinct.[29]

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24 *Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2021] ZAECGHC 118; [2022] 1 All SA 796 (ECG); 2022 (2) SA 585 (ECG) (28 December 2021) par 32.

25 Jan Boeyens (2017) https://www.theheritageportal.co.za/notice/rhinoceros-african-culture-evidence-archeology-history-and-ethnography-13-may-2017.

26 Siyabonga Africa date unknown https://krugerpark.co.za/Krugerpark_Travel_Guide-travel/images-of-kurger-an-introduction.html.

27 Siyabonga Africa date unknown https://krugerpark.co.za/Krugerpark_Travel_Guide-travel/images-of-kurger-an-introduction.html.

28 World Bank 2018 https://www.worldbank.org/en/news/feature/2018/03/-2/growing-wildlife-based-tourism-sustainability-a-new-report-and-qa.

29 Save the Rhino 2018 https://www.savetherhino.org/thorny-issues/responsible-rhino-tourism/

1.2.4 Potential of creating jobs

Tourism is not just beneficial for the gross domestic product (GDP) of a country. In South Africa, it has the potential to contribute significantly to the challenge of unemployment.

When considering the potential of rhino conservation in relation to the necessity to create jobs in South Africa, one can consider using the sustainable-use approach suggested by many scholars and interested parties. This approach would involve dehorning rhino to trade in the horns, as well as regulated and sustainable hunting of rhino.[30] In an article written by Brian Child, it is clear that strong proprietorship and high prices for natural resources (in this case rhino horn) support the sustainable-use idea. On the other hand, where prices are high and proprietorship is weak (like it is currently in South Africa), it creates the perfect conditions for natural resources to be exploited.[31] Perhaps it is necessary to revisit trade bans to pave the way for better conservation. This could be coupled with job creation in a country where there is a major demand for economic opportunity.

Scholars suggest that to keep the rhino alive, people (especially the communities involved in poaching) should be made aware of the financial value of conservation.[32] At present, one can argue that communities can easily be enticed into syndicates' schemes because live rhinos are of no benefit to them.[33] Addressing the rhino crises through conservation can address two main problems: firstly, keeping the rhinos safe, and secondly, providing the opportunity for rural communities to benefit from keeping the rhino safe and alive.[34] Empowering communities and ensuring that they receive equal financial benefit from their contributions to the cause will have widespread positive effects and will most likely provide an alternative to poaching.[35]

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30 Child 2012 *S Afr J Sci* 108(7/8) 1. [Write out the journal title]
31 Child 2012 *S Afr J Sci* 108 (7/8) 4.
32 Atkins *et al* 2018 *AAAJ* 684.
33 Save the Rhino date unknown https://www.savetherhino.org/what-we-do/involving-communities/.
34 Hübschle 2017 https://theconversation.com/the-fight-against-poaching-must-shift-to-empowering-communities-83828.
35 De Menin et al 2014 *Conservation Biology* 8-9.

Communal conservancies in Namibia have had some success in empowering communities to benefit from and live harmoniously with their natural surroundings (including rhinos and elephants).[36]

From the above it is clear that the biodiversity is important for a number of reasons. A decline of species is detrimental to healthy ecosystems. Cultural heritage is fundamental to the protection of human rights and is interlinked with the significance of the rhino – which bares historical meaning. Should biodiversity not be protected and the rhino subsequently go extinct, one can expect a decline in tourism. This in turn will have devastating consequences on the potential of job creation through conservation. The following section will discuss the demand for rhino horn.

2.3 Challenges facing rhino conservation

2.3.1 The demand for rhino horn

Rhino horn is a popular commodity in many Asian cultures. Over the last 4000 years, rhino horn has played a crucial part in traditional Chinese medicine.[37] Ground rhino horn is believed to have medicinal properties. Gout, stroke and hangovers are thought to be cured by the medicinal properties of rhino horn.[38] Recently, claims that rhino horn can cure cancer contributed to a surge in the demand for rhino horn in Vietnamese markets.[39] Moreover, rhino horn also has cultural and social significance. In Vietnam, for example, family members will give rhino horns to terminally ill patients as a symbol of comfort.[40]

One of the methods used to address the rhino crisis involves engaging with traditional Chinese medicine practitioners.[41] It is evident from interviews with practitioners that they believe strongly in the medicinal properties of rhino horn,

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36 Hübschle 2017 https://theconversation.com/the-fight-against-poaching-must-shift-to-empowering-communities-83828.

37 Cheung et al 2021 *Conservation Science and Practice* 1.

38 Ayling 2013 *Journal of International Wildlife Law and Policy* 61.

39 Milliken and Shaw *The South Africa-Vietnam rhino horn trade nexus* 14.

40 Science Daily 2018 https://www.sciencedaily.com/releases/2018/05/180514095590550.

41 Cheung et al 2018 *Tropical Conservation Science* 2.

which they believe can be used to cure high fevers and serious infections.[42] It has, however, been proven scientifically that rhino horn possesses no medicinal properties. It seems improbable or perhaps even impossible to change a centuries-old belief system and culture.[43] Some argue that the legalisation of the trade in rhino horn could possibly lead to sustainable use.[44] Some suggest that legalising trade could save the rhino and provide nature reserves and national parks with vital funds.[45]

Poaching is a very profitable undertaking, as rhino horn prices are at around $60 000 per kilogram.[46] It is estimated that global illegal wildlife trafficking (inclusive of rhino trafficking) is worth $7 to 23 billion.[47] Scholars have referred to rhino poaching as the 'Perfect Storm'; an instance where factors existing in isolation wouldn't have such a detrimental effect as when combined.[48] In this case, the inelastic demand because rhino horn is valued as a luxury item, paired with scarcity leading to great profits, creates such a detrimental combination.[49] As rhino horn (and items like ivory and tiger skins) have been in trade for thousands of years, the effect of trade bans is that some traders just moved underground. Some scientists fear that trade bans are backfiring; as the scarcity of products grows, so does the price and demand.[50] Some scholars have written about the "banking on extinction" phenomenon where poaching syndicates and central selling organisations create stockpiles and increase the prices. This leads to an increase in poaching, causing extinction and ultimately leading to the monopolising of trade.[51]

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42 Dang Vu and Nielsen 2021 *Human dimensions of wildlife* 395.
43 Cheung et al 2018 *Tropical Conservation Science* 6.
44 Cheung et al 2018 *Tropical Conservation Science* 6.
45 Wiltshire 2021 https://www.dailymaverick.co.za/opinionista/2021-02-18-legalisation-of-horn-trade-is-the-only-option-to-protect-and-grow-our-population-of-southern-white-rhino/.
46 Atkins *et al.* 2018 *AAAJ* 683.
47 Worral 2018 https://www.nationalgeographic.com/animals/article/poaching-tigers-bears-bile-farming-book-talk.
48 Conrad 2012 *Tropical Conservation Science* 246.
49 Conrad 2012 *Tropical Conservation Science* 249.
50 Gilbert 2020 https://knowablemagazine.org/article/living-world/2020/are-wildlife-trade-bans-backfiring.
51 Ferreira et al *Rhino and threat management to combat poaching* 3.

2.3.2 Local drivers behind poaching

This study focuses only on the local drivers behind poaching and innovative strategies to address them. Inadequate law enforcement is a major issue in South Africa.[52] Researchers note that enforcement is especially problematic in developing countries as prosecution takes long and, in some instances, sentencing only amounts to a small fine (equivalent to a slap on the wrist!).[53] Adding to the problem is the issue of unclear property rights. Rhinos are mostly held on government land in national parks. The tragedy of the commons comes into play with the mindset of, 'no one owns the rhino, it's on government land, best I make use of the opportunity or someone else will'.[54] There are more rhino poaching in national parks on government-owned rhino, than in private reserves.[55] Perhaps one of the greatest issues to be addressed as part of the rhino-poaching debacle is human-wildlife conflict. This can be a foreign concept to city dwellers who cannot fathom having to share a habitat with a wild animal. Realistically, those citizens living along the borders of national parks or sometimes even inside the parks, have to fight for resources while losing family members to contact with wildlife.[56] For most of these citizens who face possible death (or economic loss, for example due to elephants destroying their crops), getting rid of the problem does not seem like a big deal – even in the face of extinction.[57]

In a study on the root causes of poaching, Hübschle-Finch found that communities in and around national parks in South Africa aren't necessarily just motivated by the economic benefits of poaching.[58] It has long been understood that communities living in and around the Kruger National Park involved in wildlife trafficking have different motivations for involvement in poaching; some are opportunistic, some are motivated

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52 Conrad 2012 *Tropical Conservation Science* 250.
53 Conrad 2012 *Tropical Conservation Science* 251.
54 Sas-Rolfes 1990 *Endangered Wildlife* 2 4.
55 Conrad 2012 *Tropical Conservation Science* 250.
56 Conrad 2012 *Tropical Conservation Science* 250-251.
57 Nicole 2019 https://www.intechopen.com/chapters/66812.
58 Hübschle-Finch 2016 *The Global Initiative Against Transnational Organized Crime* 1.

by poverty, Robin-Hood styled justice and historic forced removals.[59] The root causes of poaching play a major role in wildlife trafficking, so it is important to understand them. Historical inequalities resulting from loss of land for conservation are key driving factors.[60] Communities living in and around conservation areas are often marginalised and last in line when it comes to benefitting from social and economic upliftment projects initiated by the government.[61] This study delves further into the possibilities for addressing past and present social injustices as a means to apply laws and policies to curb poaching in Chapter 6.

2.3.3. The continued resilience of criminal networks

The Skukuza court's 99.8% conviction rate is proof that the capture, conviction and sentencing of poachers is not a sufficient deterrent. Despite the fact that the court had a 100% success rate in opposing bail applications, poaching has continued.[62]

When addressing the rhino crisis, it is important to probe the resilience of criminal networks. It is also important to distinguish between the organised criminals who form the top structures of a criminal network and the members of the community who are enticed into these criminals' schemes, motivated by financial gain as a means to survive.[63] These distinctions will help target problem areas related to poaching.

Various strategies have been used to combat the criminal resilience that forms part of the rhino crisis, like increasing enforcement, using dogs for tracking, special task forces like *Operation Skhumba*, science-based interventions and community education projects.[64]

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59 News24 2016 https://www.news24.com/News24/what-motivates-sa-citizens-to-poach-rhino-20160927.

60 Network24 2016 https://www.news24.com/News24/what-motivates-sa-citizens-to-poach-rhino-20160927.

61 Hübschle-Finch 2016 The Global Initiative Against Transnational Organized Crime 2.

62 Bega 2021 https://mg.co.za/environment/2021-04-18-skukuza-court-closure-was-like-a-knife-in-the-back-of-rangers/.

63 Nanima 2016 *African Journal of Legal Studies* 222.

64 Ayling 2013 *Journal of International Wildlife Law and Policy* 72-73.

Research on the reasons for the resilience of the criminal element has revealed that the poachers operating in South Africa and Namibia used to be either individuals or randomly formed groups. This situation has changed, organised crime syndicates are presently in operation.[65] These syndicates are resilient because they have very specific skills (veterinary or hunting) and they have access to expensive and advanced equipment, making the detection and subsequent poaching of rhino quite easy.[66] The fact that these intricate networks are quite small is another factor that contributes to their longevity. They are harder to detect and more flexible. A group's resilience also relies on how favourable the environment is for criminal activity and an organisation's ability to reorganise after interference.[67] An example is the interchangeability of network members, which is quite easy in rural poaching syndicates where their communities support them.[68]

Poaching networks seem to effortlessly adapt to change and withstand disruption within their organisations.[69] Sentencing (small insignificant fines) is not a sufficient deterrent, as these 'minor' disruptions do not disrupt the organisation itself.[70] Given the dire conditions in which the involved communities live, it is quite easy to commandeer new recruits.[71] Catching perpetrators at the ground level is not sufficient to successfully disrupt the organised crime networks. Bringing the master minds of the syndicates to justice will provide the necessary disruption.[72]

Despite intervention by governments, tighter regulation on trade and cooperation between international environmental organisations, poaching continues.[73] Responses to the problem have been manifold and include amongst other things heavier sentences (though sentencing does not seem to be a sufficient deterrent), situational crime prevention and community-based interventions, but none of this has made

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65 Save the Rhino 2013 https://www.savetherhino.org/thorny-issues/mozambiques-role-in-the-poaching-crisis/.
66 Montesh *Rhino poaching: A new form of organized crime* 2.
67 Cavallaro *et al* 2020 *PLoS ONE* 3.
68 Ayling 2013 *Journal of International Wildlife Law and Policy* 76.
69 Ayling 2013 *Journal of International Wildlife Law and Policy* 69.
70 De Menin et al 2014 *Conservation Biology* 8.
71 Ayling 2013 *Journal of International Wildlife Law and Policy* 70.
72 Nanima 2016 *African Journal of Legal Studies* 222.
73 Ayling 2013 *Journal of International Wildlife Law and Policy* 58.

great inroads.[74] Persistent wildlife crime can only be addressed if there is an understanding of the higher levels in the criminal networks intrinsically involved in organising poaching activities.[75]

There are different criminal networks involved in the poaching process. Harvesting networks, for example, can be highly sophisticated. Foot soldiers, often from Mozambique, are used to doing dangerous dirty work. Poor villages are known to take advantage of the poor maintenance and management of the Kruger National Park on the Mozambican side.[76] These villagers can slip into and out of South Africa by crossing the border undetected. In many cases where suspected poachers have been released on bail, they have made use of this and fled to Mozambique. What counts in their favour is the fact that there is no extradition treaty between South Africa and Mozambique.[77] Some involved in these highly sophisticated criminal networks have abused the legal trade system in their favour. The landmark case of Chumlong Lemtongthai sheds light on such an instance.[78]

Mr Lemtongthai was a Thai national who hired sex workers to pose as hunters. Legal hunting permits were issued to the women, who were promised a luxury holiday in return for a professional hunter killing rhinos on their behalf.[79] There are also criminal syndicates that pose as conservationists (like the Groenewald gang, which also included trained veterinarians and professional hunters).[80] Theft networks targeting stockpiles of rhino horn have also been recorded.[81] These wildlife trafficking networks must have some sort of contact with distribution networks to sell the rhino horn into domestic or international markets.[82]

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74 Ayling 2013 *Journal of International Wildlife Law and Policy* 60.
75 Nanima 2016 *African Journal of Legal Studies* 222.
76 Save the Rhino 2013 https://www.savetherhino.org/thorny-issues/mozambiques-role-in-the-poaching-crisis/.
77 Collins 2020 *European Journal of Law and Economics* 369.
78 Ayling 2013 *Journal of International Wildlife Law and Policy* 65.
79 Ayling 2013 *Journal of International Wildlife Law and Policy* 65.
80 Financial Transparency Coalition 2013 https://financialtransparency.org/how-the-groenewald-gang-made-millions-off-illicit-wildlife-trafficking/.
81 Reuters 2014 https://www.reuters.com/article/ozatp-us-safrica-rhinos-idAFKBN0D908E20140423.
82 Ayling 2013 *Journal of International Wildlife Law and Policy* 65.

1.3 Summary

Given South Africa's wonderful biodiversity and the contribution of this biodiversity to the economy of the country, rhino conservation makes moral and financial sense. The fight to conserve the rhino is a difficult one. Many role players are involved, and many strategies have been attempted, some more successful than others.

One can argue that imprisonment has not been a successful strategy so far, as the sentencing is insufficient, and the kingpins of criminal networks are rarely brought to justice. Some successful strategies include the translocation of rhino and providing alternative economic options for impoverished communities (this is discussed in further detail in Chapter 4 and 6 below). However, we still have a critical situation: poaching continues and the rhino population is dwindling.

Chapter 3
Identifying local driving factors behind poaching

3 DO NOT DELETE!!

1.4 Introduction

The previous chapter discussed the importance of the protection of biodiversity in general and the protection of the rhino specifically. This chapter identifies the local key driving factors behind poaching that are within South Africa's control. They include inadequate law enforcement, legal uncertainty about ownership rights and human-wildlife conflict. This is not an exhaustive list of the factors fuelling rhino poaching, as distant market drivers such as trade, inelastic demand and high profits also play a role. However, for the purposes of this dissertation, only local key driving factors are discussed in detail. In identifying these factors, one can work towards innovatively applying law and policy to curb poaching.

The chapter first examines inadequate law enforcement, including inadequate law enforcement vis-à-vis socio-economic circumstances, the pitfalls of green militarisation, the missed opportunity to adopt the National Integrated Strategy to Combat Wildlife Trade (NISCWT) and the fact that there is a lack of extradition treaties between key role players involved in poaching.

The second local key driving factor fuelling poaching, namely legal uncertainty around ownership rights, is discussed by considering the tragedy of the commons, forced removals (and the issue of communities versus protected land) and privatising ownership.

The discussion on human-wildlife conflict considers the strained relationship between conservation and community and subsequent retaliatory killings of wildlife. The chapter concludes with a summary.

1.5 Inadequate law enforcement

Law enforcement in general is under scrutiny in South Africa. There are a few major issues contributing to the challenge of rhino poaching including amongst others; funding for law enforcement and subsequent understaffing, the large area of the KNP which cannot be properly manned, and corruption.

According to statistics, crime is on the rise each month in South Africa. The growing crime rate can be attributed to declining budgets and a shrinking police force.[83] This has a direct impact on the capacity of law enforcement agencies to deal with rhino poaching and organised criminal networks intrinsically involved in wildlife crimes.

Another problem contributing to inadequate law enforcement is the sheer size of the Kruger National Park. It is near impossible for enforcement officials to man the entirety of the park, which provides a platform for poachers to access rhino without much deterrence.[84]

Compounding to the factors mentioned above is the prevalence of corruption. The high value of rhino horn negatively impacts field workers (including the police and government officials). To illustrate, in 2014, two police constables and a SANParks sergeant were arrested in connection with a rhino poaching incident.[85] In 2008, officials from the Vietnamese embassy stationed in Pretoria were implicated in the rhino horn trade.[86] The corruption is fuelled by poor law enforcement against illegal traders, and vice versa.

Besides corruption, and the fact that corrupt officials often go undetected or unpunished, the socio-economic circumstances in South Africa make rhino poaching less of a priority than other crimes.

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83 Businesstech 2022 https://businesstech.co.za/news/government/594016/south-africa-lost-20000-police-officers-in-the-past-five-years-and-new-hires-cant-keep-up/.

84 Peace Parks Foundation 2021 https://www.peaceparks.org/meerkat2021/.

85 Department of Environmental Affairs 2014 https://www.environment.gov.za/mediarelease/formersanparksranger_arrested.

86 Conrad 2012 *Tropical Conservation Science* 251.

The following paragraphs will discuss inadequate law enforcement in light of socio-economic circumstances, the pitfalls of green militarisation, the missed opportunity to adopt the *NISCWT* and the lack of extradition treaties between the main countries involved in the rhino-poaching crisis.

1.5.1 Inadequate law enforcement vis-à-vis socio-economic circumstances

The trade ban on rhino horn has been ineffectual as inadequate law enforcement contributes to poachers' success. Developing countries (like South Africa) sometimes lack 'political will' (as scholars put it) to curb rhino poaching. Much time elapses before prosecution, fines are small and sentencing insignificant.[87] Besides the fact that trade bans can be costly, they may not be a priority.[88] In South Africa, for example, there has been a long history of inequality and a disregard for basic human rights. While many parties are invested in the race to save the rhino, for example SANParks and Save the Rhino International, it might not be a priority to officials outside of these organisations to save animals. Hübschle-Finch writes that there are many motivators behind involvement in poaching, be it economic gain, desperation or rebelling against the rules.[89] When a 17-year-old suspected poacher was caught in the Kruger National Park, he was interrogated and asked to explain his involvement. He had been promised a 12,5 kg bag of mealie meal – and he was the only breadwinner in the house.[90] This demonstrates that some people become involved in poaching and illegal wildlife crime because their lives depend on it. On the flipside, conservation might provide poor communities with much needed financial injections to dissuade involvement in crime and provide sustainable sources of income. Rhinos are more valuable alive than extinct.

In order to address the rising number of poachers in national parks, conservationists have adopted green militarisation strategies to combat poachers. Groups are often

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87 University of Cape Town 2015 https://www.news.uct.ac.za/article/-2015-05-29-a-solution-to-south-africas-wildlife-crisisa.

88 Conrad 2012 *Tropical Conservation Science* 251.

89 Hübschle-Finch 2016 *The Global Initiative Against Transnational Organized Crime* 2.

90 Hübschle-Finch 2016 *The Global Initiative Against Transnational Organized Crime* 3.

heavily armed. Park officials tasked with law enforcement have been meet with criticism. The perils of green militarisation are discussed next.

1.5.2 The pitfalls of green militarisation

As a response to the increase in poaching, officials have aimed to militarise anti-poaching efforts to protect wildlife.[91] Through the 'rhinofication' of security in South Africa, park rangers have become law enforcers themselves to protect targeted rhino, especially in the Kruger National Park.[92]

Many scholars and studies suggest that there are many long-term disadvantages to such a strategy. Green militarisation has proved to be an inadequate form of law enforcement.[93] This is evident from the strained relationships between communities suffering in poverty and officials trying to save rhinos from extinction. Taking into account the interrelationship between poaching and socio-economic issues is much needed.

Duffy *et al.* argue that militarising conservation is fundamentally unjust and that it would be difficult to enforce in the long run, especially if it does not go hand-in-hand with addressing socio-economic inequalities.[94] In applying law and policy innovatively, one can aim to address both socio-economic issues on the one hand, and the rhino trafficking crisis on the other hand – more on this in Chapter 6. One argument against green militarisation is that it resembles apartheid in the sense of victimisation and violence against local communities.[95] The development of networks to aid the military-styled approach often causes distrust between community members, making cooperation harder. Another issue with the militarisation method is that it is nearly impossible to address rangers or officials' unjust violence against communities and suspects because they are regarded as 'heroes'.[96] Such tactics destroy any semblance of a trust relationship between conservationists and local communities, who are

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91 Duffy et al 2019 *Biological Conservation* 66.
92 Humphreys and Smith 2014 *International Affairs* 795.
93 Duffy et al 2019 *Biological Conservation* 66.
94 Lunstrum 2014 *Annals of the Association of American Geographers* 823.
95 Duffy et al 2019 *Biological Conservation* 68.
96 Duffy et al 2019 *Biological Conservation* 68.

essentially vital in the fight against wildlife crime. Green militarisation, violence and the possible death of poachers due to these efforts aggravate communities even further in a time where their cooperation is vital to save the rhino.

One can argue that the non-adoption of *NISCWT* was a missed opportunity to further strengthen law enforcement and approaches to combat rampant wildlife trafficking in South Africa.

1.5.3 A missed opportunity to adopt The National Integrated Strategy to Combat Wildlife Trafficking (NISCWT)

Though the rhino-poaching crisis has received media attention and has inspired a vast array of subsequent policies, the question remains whether these are at all successful. Many ideas have sprung forth from the fight against rhino poaching. For instance, in 2015 a law enforcement strategy on wildlife trafficking was drafted following the input of valuable role players. It was presented at the Conference of Parties 2016 in Johannesburg, but to date the strategy has not been approved by Cabinet.[97] The National Integrated Strategy to Combat Wildlife Trafficking was recommended by representatives of the South African Police Service (*SAPS*), the Department of Environmental Affairs, the South African Revenue Service (*SARS*) and the National Prosecuting Authority, amongst others. In the foreword of the NISCWT, officials reiterate that wildlife crime has a devastating effect on our ecosystems and that organised crime and criminal syndicates pose an increasing threat to South Africa's national security, mainly because these syndicates corrupt many government officials and processes.[98]

The strategy aims to empower law enforcement officials directly involved in the management of wildlife crime through the following strategies: Firstly, the strategy focuses on increasing and enhancing law enforcement through advanced investigation and prosecution. In order to achieve this, there is a need for optimum

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97 Rademeyer and Shaw 2021 https://www.dailymaverick.co.za/article/2021-09-21/saving-rhinos-is-a-litmus-test-for-tackling-organised-crime-and-corruption-in-south-africa/

98 Foreword of the NISCWT 2017 11.

technology, a change in policy and a strengthening intergovernmental relationships. In the second place, great improvement in law enforcement is needed to effectively investigate, prosecute and adjudicate wildlife trafficking as organised crime. And lastly, the strategy aims to increase and improve relationships and cooperation between national, regional and international parties, especially agencies from transit and market countries.[99] The NISCWT goes further and admits that the low risk of environmental crime in South Africa creates the perfect environment for wildlife syndicates. Weak law enforcement and lack of political will to prevent and prosecute those involved in transnational environmental crimes makes it easy for criminals to get their hands on rhino horn.[100] Should the strategy have been adopted, it could have had positive effect on the fight against rhino poaching. Adopting the strategy could have further contributed to innovative solutions to curb poaching.

Arguably, an opportunity has been missed. Implementation of the strategy could have strengthened law enforcement's potential actions against poaching. In addition to this complication, legal uncertainty about ownership rights contributes as another driving force. The tragedy of the commons specifically contributes to poaching of rhinos mainly kept on public land.

1.5.4 Lack of extradition treaties between key role players in rhino poaching

The porous border between South Africa and Mozambique inside the KNP poses a problem.[101] As seen in Chapter 2, poachers who reach the safety of Mozambique usually go undetected. Though the Prevention of Organised Crime Act 121 of 1998 (*POCA)* provides for extradition in some instances, practical execution of such provision is near impossible.[102] Scholars have suggested that amendment of the *POCA* will be greatly beneficial in addressing the disruption of organised criminal networks operating in South Africa, Mozambique and Vietnam. Though Chapter 5 of this dissertation deals with the national, regional and international legal framework for addressing poaching, it is important to note here that there are no extradition

99 Executive summary of the NISCWT 2017 13-14.
100 NISCWT 2017 15.
101 Ayling 2013 *Journal of International Wildlife Law and Policy* 60.
102 Nanima 2019 *PER/PELJ* 1.

treaties between South Africa and Mozambique or South Africa and Vietnam. Strengthening international cooperation between these states by signing extradition treaties will assist in prosecuting the leaders of criminal syndicates.[103]

The second of the three local key driving factors pertains to legal uncertainty surrounding ownership rights. The following paragraph will examine the issue on why poaching is prevalent in light of the tragedy of the commons, communities forcibly removed from ancestral land to make way for conservation and whether privatising ownership would serve as deterrent against poaching.

1.6 Legal uncertainty about ownership rights

1.6.1 Tragedy of the commons

One of the factors that fuel rhino poaching is the fact that most rhinos are kept on public land.[104] Suffice it to say the tragedy of the commons is clearly identifiable in the case of poaching in state-owned conservation areas. The link between the tragedy of the commons and rhino poaching is that persons with access to public land use the 'available' resource for personal gain and in doing so, deplete the resource.[105] Rhinos are rarely targeted on privately owned land.[106] Common resources are often extracted without due consideration for the effect this will have on others, or the resource itself.[107] Subsequently, this non-consideration results in the over-exploitation of the resources or inevitably, in the case of the rhino, its extinction. In order to address this problem, those tasked with governing the common resource should either restrict access to it or provide incentive not to overexploit the shared resource.[108]

Communal conservancies in Namibia offer more proof that rhino belonging to 'no one in particular' is a problem. Data shows that poaching has decreased since the

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103 Nanima 2019 *PER/PELJ* 34.
104 Conrad 2012 *Tropical Conservation Science* 250.
105 Spiliakos 2019 https://online.hbs.edu/blog/post/tragedy-of-the-commons-impact-on-sustainability-issues.
106 Conrad 2012 *Tropical Conservation Science* 250.
107 Lin *Wildlife resources – a victim of "the Tragedy of the Commons?" A case study of Zambia* 7.
108 Lin *Wildlife resources – a victim of "the Tragedy of the Commons?" A case study of Zambia* 7.

establishment of conservancies in 1996.[109] Conservancies provide an opportunity for local communities to ensure the protection of a communal asset that benefits them directly.[110] The 'assets' are moved from public protection (which offers little protection) to private protection. The financial incentive to conserve the rhino provides a platform for sustainable jobs in the community.[111] In her dissertation, Lin writes that community-based natural resource management should be used to work against the phenomenon of the tragedy of the commons. Just like with Namibia's conservancies, combining conservation efforts and rural development will motivate communities to protect shared resources – another way law and policy could be developed to curb poaching while investing in community upliftment.[112]

In South Africa, the tragedy of the commons is intertwined with the issue of historical forced removals of communities from ancestral land to conserve natural resources and wildlife.

1.6.2 Forced removals: Communities versus protected land

Another subject to be explored in the discussion of unclear property rights is the relocation and eviction of communities from protected land.[113] There has been a plethora of environmental legislation on the protection of national parks, provincial parks, world heritage sites and other reserves. This led to the relocation of communities living on the protected land.[114] Historically, local communities all over Africa had to relinquish ancestral areas, grazing land and burial grounds to make space for protected areas.[115] It is undisputed that the gains from conservation have been inequitable, the elite's pockets remain full and communities once thriving on protected land suffer in poverty.[116] Inconsiderateness towards African property and hunting rights have created a major issue: many areas in the Kruger National Park

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109 Conrad 2012 *Tropical Conservation Science* 250.
110 Conrad 2012 *Tropical Conservation Science* 250.
111 Conrad 2012 *Tropical Conservation Science* 250.
112 Lin *Wildlife resources – a victim of "the Tragedy of the Commons?" A case study of Zambia* 8.
113 Carruthers 2007 *Conservation and Society* 292.
114 Carruthers 2007 *Conservation and Society* 294.
115 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 7.
116 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 7.

are subject to land claims.[117] The Makuleke tribe had been living in the Pafuri region of the KNP and had been forcibly removed. In post-Apartheid South Africa, their land claim was approved and the land had been 'restored'. They are able to use the land for conservation purposes, but they are unable to mine, prospect, or continue with residential or agricultural activities on the land.[118] Their right to use resources are heavily limited. One can view this conflict from the side of conservation and from the side of impoverished communities;. conservation is important and the KNP is a popular destination for tourists who want to see the indigenous fauna and flora South Africa has to offer - on the other hand, one can sympathise with the communities (such as the Makuleke people) who had ancestral ground (with abundant resources) stripped away, with little compensation and no great alternative. It is no wonder many villagers seek the pot of gold at the end of the illicit wildlife trade rainbow.

The villagers who once owned the land now protected in the name of conservation were initially allowed access to medicinal plants, grazing and hunting for resources. However, park officials could not differentiate between community members and possible illegal intruders, so access was stopped in its entirety.[119]

Undoubtedly, there is a strained relationship between the communities who were not only forcibly removed from ancestral land, but who had been estranged from the benefits derived from living in national parks and from conservation efforts. In identifying key local driving factors fuelling poaching, one should look at privatising ownership as a means to heal the relationship between local communities and conservation.

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117 Mokoena 2021 https://www.parliament.gov.za/news/limpopo-and-mpumalanga-land-claimants-demand-equitable-share-kruger-national-park.

118 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 8.

119 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 9.

1.6.3 Privatising ownership

Apartheid-era conservation laws in South Africa led to the privatisation of wildlife ownership. However, at present only 0.5% of rhino is owned by black Africans through a Worldwide Fund for Nature (*WWF*)-custodianship programme.[120] Though post-apartheid South Africa has seen many transformative laws and policies that pave the way to equality, it seems that many of the conservation policies have not kept up. Many communities have no other option than to take part in illegal activities to win their fight against poverty.[121] Some scholars even suggest that private ownership can be used to curtail rampant rhino poaching. Should international trade bans be lifted and the hunting and dehorning of rhino be allowed, private owners of rhino may be able to sustainably trade in rhino products, while simultaneously keeping rhino populations safe from illegal trafficking.[122] This solution to the problem will be heavily reliant on the cooperation between the state and private owners of rhino. The state will have to up the ante on regulating trade and prosecuting violations.[123] However, there is fierce opposition to the idea of lifting trade bans.

In summary, as long as the communities that once thrived within national parks and protected areas live on the outskirts of the parks with little to no job opportunities and infrastructure and no sharing in the economic benefits of conservation, their continued participation in illegal poaching as opposed to supporting conservation can be expected.[124]

The last of the three local key driving factors is human-wildlife conflict. The next section sheds light on the strained relationship between wildlife and the communities living in close proximity to them, as well as the subsequent retaliatory killings.

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120 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 9.

121 Jain 2017 https://news.mongabay.com/2017/03/probing-rural-poachers-in-africa-why-do-they-poach/#:~:text=Indeed%2C%20the%20study%20does%20show,living%20in%20average%2Dincome%20households.

122 Corrigan and Roodt (no date) https://gga.org/can-property-rights-and-trade-save-africas-rhino/.

123 Corrigan and Roodt (no date) https://gga.org/can-property-rights-and-trade-save-africas-rhino/.

124 Hübschle and Shearing 2018 *Global Initiative Against Transnational Organized Crime* 12.

1.7 Human-wildlife conflict

1.7.1 Strained relationship between conservation and community

Africa has over 3 000 protected areas and houses the largest number of wild animals in the world (based on density and diversity).[125] However, it has been suggested that these protected areas, though in the best interest of conservation, are detrimental to the livelihoods of local communities. They cause a strained relationship between communities and conservationists.[126] Globally, an estimated 50% of land used for protected areas once belonged to indigenous peoples who were forced off their ancestral land and were provided with inadequate alternatives.[127] Many of these communities still live on the outskirts of national parks today, which brings them into regular conflict with park officials as well as wildlife.[128]

Human-wildlife conflict is a real threat for the communities who live in or around national parks. The same is true for commercial and subsistence farmers.[129] The conflict arises from overlapping competition for resources (water, food, land).[130] It is noted that crop damage attributed to rhinos is detrimental to the conservation effort.[131] Such conflict is not unique to South Africa. In Malaysia for instance, tigers attacked humans or livestock three out of five days for a period of fifteen years.[132] It is only natural that people who have had their crops destroyed or livestock ravaged or who even had family members pass away due to attacks, will see no need in keeping a species alive 'for conservation's sake'.[133] The relationship between community and wildlife can crumble even further when trade bans remove any economic benefit that could be derived from the animal.[134]

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125 Seoraj-Pillai and Pillay 2017 *Sustainability* 2.
126 Thondlana and Cundill 2017 *International Journal of Biodiversity Science, Ecosystem Services and Management* 204.
127 Seoraj-Pillai and Pillay 2017 *Sustainability* 2.
128 Nicole 2019 https://www.intechopen.com/chapters/66812.
129 Seoraj-Pillai and Pillay 2017 *Sustainability* 3.
130 Seoraj-Pillai and Pillay 2017 *Sustainability* 1.
131 Conrad 2012 *Tropical Conservation Science* 250.
132 Conrad 2012 *Tropical Conservation Science* 250.
133 Nicole 2019 https://www.intechopen.com/chapters/66812.
134 Conrad 2012 *Tropical Conservation Science* 251.

In thinking about innovative strategies to protect the rhino (or any other animal being poached), the inclusion of these community members in strategies to lawfully and sustainably gain something from the protection of the rhino is much needed. Historically, conservation practices have come at the expense of local communities. Most often there is more money to be made from illicit trade in wildlife than conservation.[135]

For those who live in cities, it can be hard to imagine that there can be a daily conflict with wildlife for resources. Retaliatory killings can be the order of the day if your livelihood depends on it. This causes the tension between communities and managers or owners of valued wildlife.

1.7.2 Retaliatory killings

Retaliatory killings of wildlife are in direct response to human-wildlife conflict. In a study conducted in a Ugandan national park, the relationship between wildlife and communities living within or along the borders of the park was found strained because there is no compensation for human-wildlife conflict.[136] Another issue raised by community members is the delay in response from rangers in instances where the villagers face danger or are being plagued by a wild animal. Villagers are mainly concerned about crop destruction, livestock predation, and illnesses transmitted from wild animals to livestock (for example ticks).[137] Loss of life and monetary loss spark retaliatory killings of animals. Poaching occurs due to past experiences and as a pre-emptive precaution against possible attacks or crop destruction.[138] As conservation laws evolve, so the conditions in which fauna and flora could flourish evolved. It is not so easy for communities nowadays to protect themselves against invading wildlife as parks and law enforcement prohibits it.[139] Communities rely on park staff and rangers to manage the losses villagers suffer due to wildlife.

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135 Hübschle and Shearing 2018 *Global Initiative Against Organized Crime* 4.
136 Moreto 2019 *Criminal Justice Studies* 9.
137 Moreto 2019 *Criminal Justice Studies* 10.
138 Viollaz, Thompson and Petrossion *Animals* 3281.
139 Massé 2016 *Conservation and Society* 106.

The fact that already poor and suffering communities have to compete with wildlife for resources and that their resistance against conservation is met by law enforcement, furthers tension between the conservationist effort, law enforcement, and communities, whose help is paramount in the anti-poaching endeavour.

1.8 Summary

There are three main local driving factors behind the poaching crisis. Firstly, there is inadequate law enforcement due to corruption, lack of political will, improper enforcement of the trade ban, and other failed attempts such as the green militarisation effort. Secondly, legal uncertainty about property rights, specifically relating to ownership, plays a role. The tragedy of the commons is relevant to shared natural resources and this poses a problem as most rhinos are kept on state-owned land. Other issues such as historical injustices, relocation and eviction of communities from protected land, and subsequent unequal sharing of benefits from conservation, fuels negative attitudes towards protecting rhino. Lastly, human-wildlife conflict poses a great threat to those communities in direct competition with wild animals for shared resources. Many communities have strained relationships with the wild animals that regularly destroy their crops, sometimes even contributing to a loss of property or family members.

Central to the local key driving factors as discussed in detail above is a definite conflict between humans and wildlife. One can argue that there exists a misaligned appreciation of the value of wildlife on the one hand, perhaps through the lens of a tourist in the Kruger National park, and on the other hand the perceived value of rhino by a member of the impoverished communities adjacent to the KNP.

Chapter 4
Critical reflection on current anti-poaching strategies

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1.9 Introduction

This chapter explores the current anti-poaching strategies, in particular the four pillars of the National Integrated Rhino Strategy which was adopted by the South African Cabinet in 2014. The discussion examines the subcategories of the strategy that contribute to the fight against wildlife crime. These are compulsory interventions (including arrests and prosecutions, pro-active anti-poaching and responsive legislative framework); interventions to increase rhino numbers (including strategic removals, sanctuaries, conservancies, strongholds and conservation husbandry); long-term sustainability interventions (including creating sustainable demand, supply options and alternative economic choices for communities); and lastly game-changing interventions (including disruption of organised crime, technology and empowering local people).

In critically reflecting on the current anti-poaching strategies, the study draws a link between these strategies and the key driving factors discussed in the previous chapter. The chapter asks the question of whether the four pillars of the National Integrated Rhino Strategy address the key driving factors, and if not, how we could address the void by applying law and policy innovatively to curb rhino poaching.

1.10 The four pillars of the National Integrated Rhino Strategy

The National Integrated Rhino Strategy is an innovative plan composed through the cooperation between different role players. At its core, the strategy aims to address one of South Africa's national priority crimes: rhino poaching. The strategy has four

main components: compulsory interventions, management of rhinoceros populations, long-term sustainability interventions, and new interventions.[140]

1.10.1 Pillar 1: Compulsory interventions

1.10.1.1 Arrests and prosecutions

Many government agencies and departments support the SAPS in their duty to enforce anti-poaching legislation.[141] The SAPS has many initiatives to combat rhino poaching, as is evident from the successes of the Saps' priority crime investigation unit, the Hawks. The Kruger National Park is one of the most targeted parks due to its size and the unmanned borders shared with Zimbabwe and Mozambique. Subsequently, the KNP is a main priority.[142] Many initiatives emanated from the need to protect the rhinos remaining within the borders of the KNP whereunder the Mission Area Joint Operations Command and the Intensive Protection Zone approach which consists of capable anti-poaching units.[143] One of the greatest role players in the integrated strategy is the Department of Justice and Constitutional Development. The department's efforts against wildlife crime led to the creation of the Skukuza court – which in turn contributed to a high conviction rate of wildlife traffickers.[144] Quite recently, the court was praised for handing down sentences of 13 and 16 years respectively to two poachers for their wildlife crimes.[145] Even though the success of the Skukuza court should've contributed to a decline in poaching, statistics show that this is not the case. As mentioned earlier, the local community members enticed into poaching are the ones usually caught and reprimanded. Poaching continues because

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140 Department of Fisheries, Forestry and the Environment 2019 https://dffe.gov.za/progressonimplementationofintegratedstrategicmanagementofrhinoceros.

141 Foreword of the National Integrated Strategy to Combat Wildlife Trafficking 2017.

142 Siyabonga Africa date unknown https://www.krugerpark.co.za/krugerpark-times-e-6-rhino-poaching-update-25237.html#:~:text=Extinction%20of%20Western%20Black%20Rhino&text=In%20July%202014%2C%20the%20Department,the%20famous%20South%20African%20park.

143 Department of Fisheries, Forestry and the Environment 2019 https://dffe.gov.za/progressonimplementationofintegratedstrategicmanagementofrhinoceros.

144 Department of Fisheries, Forestry and the Environment 2019 https://dffe.gov.za/progressonimplementationofintegratedstrategicmanagementofrhinoceros.

145 Mabuza 2021 https://www.timeslive.co.za/news/south-africa/2021-05-19-hefty-sentences-handed-to-rhino-poachers-including-former-sanparks-employee/.

these footmen are replaceable. As is discussed in Chapter 6, there is great need to expose criminal networks and prosecute the upper echelons of wildlife syndicates.[146]

Traditionally, persons caught for poaching get off with a fine or a minimal term of imprisonment for trespassing or possession of an illegal firearm.[147] In recent years, however, this trend has been bucked. In the infamous Ndlovu-case, three wildlife traffickers visited various lodges and reserves, posing as guests, after which they poached rhinos. The subsequent sentencing of the poachers was severely criticized and regarded as 'shockingly disproportionate' after the judge sentenced the accused to 25 years in prison. Though, on appeal Judge Van Zyl dubbed the sentences as justified under the circumstances.[148]

1.10.1.2 Pro-active anti-poaching

The lengthy sentencing in the Ndlovu-case could be seen as a step in the right direction. In theory severe sentencing should dissuade poachers from getting involved in illicit wildlife practices. In reality the success of the Skukuza court and the subsequent sentencing of poachers does not seem to have the desired effect. More often than not those convicted 'poachers' are nothing more than replaceable foot soldiers, desperate individuals looking to make a quick buck. There is no other option than to prosecute the so called 'kingpins' – the masterminds behind organised criminal activities. If not, poaching will continue as it does – unaffected by arrests and prosecutions.[149] Pro-active anti-poaching campaigns have seen many failures.[150] The reason why this dissertation focusses on the local key driving factors of poaching is that it is out of South Africa's control to change age-old Asian beliefs; necessitating the use of rhino horn in traditional medicine.

The reactance theory plays an important role in understanding why poaching continues despite efforts to dissuade people from poaching. The theory in essence

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146 Nanima 2016 *African Journal of Legal Studies* 222.
147 Mogoshi *An analysis of enforcement of laws on rhino poaching in South Africa* 4.
148 *Ndlovu and Others v S* (541/2019) [2020] ZAECGHC 131; 1 All SA 538 (CCG); 2021 (1) SACR 299 (ECG) (24 November 2020) para 68.
149 Mogoshi *An analysis of enforcement of laws on rhino poaching in South Africa* 5.
150 Glenn et al 2019 *South African Journal of Science* 1.

points to rebellion. It is a response from persons who feel that their innate desire to be free and make decisions is being threatened.[151] In addition, the phrasing used in ad campaigns against rhino poaching may very well lead to miscommunication.[152] It is therefore unwise to propagate the whereabouts of rhino to opportunists. The fact that rhino are on the brink of extinction and evidently rare contributes to its value and subsequent demise.[153]

In response to relentless and continued poaching, especially on government land, wildlife managers decided on a militarised approach in the fight against wildlife trafficking. Though this method has been scrutinized severely, supporters argue that rhino aren't just another species on the brink of extinction, but links with South Africa's national heritage.[154] Contributing further to the antagonism between wildlife rangers and communities adjacent to the KNP for example, is the wording 'shoot to kill'. As will be discussed in length further in this dissertation in Chapter 6, mending the broken relationship between conservation and community is of the utmost importance in the fight against wildlife crime.[155]

1.10.1.3 Responsive legislative framework

The provisions of the National Environmental Management: Biodiversity Act 10 of 2004 (*NEMBA*) and the National Environmental Management: Protected Areas Act 57 of 2003 (*NEMPAA*), contributed to the emergence of the National Strategy for the Safety and Security of Rhinoceros Populations in South Africa. It is expected that all law enforcement and conservation agencies involved in conservation of rhino should implement and maintain the strategy.[156]

Though one can argue that South Africa has a responsive legislative framework addressing the issue of conservation and more specifically, the conservation of rhino

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151 Steindi et al 2015 *Zeitschrift für Psychologie* 205.
152 Glenn et al 2019 *South African Journal of Science* 2.
153 Glenn et al 2019 South African Journal of Science 2.
154 Lunstrum 2014 *Annals of the Association of American Geographers* 827
155 MacDonald (2019) https://daily.jstor.org/the-military-response-to-poaching/.
156 Department of Environmental Affairs date unknown *National Strategy for the Safety and Security of Rhinoceros Populations in South Africa*.

through anti-poaching strategies, the practicality of implementing provisions on different levels (local, provincial and national) proves to be problematic as standard are complex and sometimes contradictory. Additionally, there exists a statistic void in the success or failure of anti-poaching strategies.[157]

1.10.1.4 A link with key driving factors

Keeping in mind the local key driving factors behind poaching as discussed in Chapter 3, it is important to establish whether the National Integrated Strategy makes adequate attempts to address the factors that drive poaching. All three subsections – arrests and prosecutions, pro-active anti-poaching and responsive legislative framework – relates to the key element of inadequate law enforcement. Firstly, though arrests and prosecutions have been 'successful' in the eyes of the Skukuza court, poaching has continued. Green militarisation under pro-active anti-poaching (as discussed in Chapter 3) has been ineffective as rangers, themselves becoming law enforcers, further destroy relationships between communities - which is a vital issue in the fight against rhino poaching. And lastly, though South Africa has a responsive legislative framework (not just nationally, but regionally and internationally through conventions as well), standards are complex and practical implementation is near impossible.

1.10.2 Pillar 2: Interventions to increase rhino numbers

1.10.2.1 Strategic removals

Strategic removals and translocations have been proven to be successful as no translocated rhino have been poached.[158]The biological management of rhino is used to maintain rhino strongholds and to lure poachers away from cows. The South African Veterinary Council has many procedures to follow when relocating rhinos in

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157 Ferreira *Is it just horny business?*

158 Department of Fisheries, Forestry and the Environment 2019 https://dffe.gov.za/progressonimplementationofintegratedstrategicmanagementofrhinoceros.

order to curb the spread of disease. Strategic removals also go hand in hand with close guarding and monitoring.[159]

1.10.2.2 Sanctuaries, conservancies and strongholds

The creation of rhino strongholds yields positive results. Through concentrating rhino in a specific area protected by armed rangers and necessary technology to scout approaching poachers, rhino stay protected.[160] Though, no easy task; the cost of conserving rhino is astronomical. As rhino become sparse and the demand for rhino horn grows, the costs involved in keeping rhino safe against poachers increases. [161] Unfortunately, the high price connected with the safeguarding of rhino dissuades private sector owners to continue their conservation efforts.[162] As private conservancies withdraw from conservation activities, the onus on the state becomes heavier. The problem with this is that the rhinos on state-owned land are far more vulnerable and at a greater risk of being poached than those living on private reserves.[163]

1.10.2.3 Conservation husbandry

Though rhino can be bred in captivity and be kept safe to an extent, scientists note that real success lies in rehabilitating rhino orphans to be released in the wild. Success of conservation husbandry can only be measured once released rhinos can breed in the wild without any human intervention[164]

1.10.2.4 A link with key driving factors

All three strategies of strategic removals, sanctuaries, conservancies and strongholds and conservation husbandry tie in with law enforcement. Strategic removals and the

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159 Department of Forestry, Fisheries and the Environment 2019 https://dffe.gov.za/progresontheimplementationoftheintegratedstrategicmanagementofrhinos.

160 Conciatore 2020 https://www.awf.org/news/anti-poaching-sanctuaries-safeguard-africas-rhinos.

161 Mogoshi *An analysis of enforcement of laws on rhino poaching in South Africa* 5.

162 Author *An Analysis of Enforcement of Laws on Rhino Poaching in South Africa* 5-6.

163 Stoddard 2021 https://www.dailymaverick.co.za/article/2021-02-09-statistics-show-rhino-poaching-in-south-africa-plunged-33-in-2020/.

164 Ferreira *Is it just horny business?*

creation of strongholds go hand in hand with close guarding and monitoring, necessitating strong law enforcement, which can be costly.

A strategy that may not have been explored adequately yet is sanctuaries, conservancies and strongholds. Community conservation through conservancies in Namibia have been successful. No data could be found on the establishment of rhino conservancies in South Africa. This is perhaps a missed opportunity to address the both the issue of unclear property rights and the inclusion of communities in the safeguarding rhino. –It would make the rhino worth more alive than dead.

1.10.3 Pillar 3: Long-term sustainability interventions

1.10.3.1 Creating sustainable demand

There has been a long dispute surrounding creating sustainable demand and most importantly whether it would have the desired effect of dissuading poachers. One of the proposals received by the International Wildlife Management Congress originated from the Ezemvelo KZN Wildlife. The 2012 proposal outlines a scenario whereby a centralised organ of state will be responsible for selling harvested private and public rhino horn to pharmaceutical target markets in Asia. Hypothetically once the market is flooded with rhino horn, criminal syndicates won't have the incentive to poach rhino any longer.[165]

Though implementation of the proposal might be successful, the fear is that it might not. In the first place there is no guarantee that criminal syndicates will step aside and leave rhino to be. Perhaps illegal means of obtaining rhino horn will continue undisturbed. Should legal harvesting make rhino horn more affordable, it can lead to the expansion of the market leading to bigger demand. There is no way to know whether such a proposal will be successful or not without a test run.[166]

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165 Ayling 2013 *Journal of International Wildlife Law and Policy* 74.
166 Ayling 2013 *Journal of International Wildlife Law and Policy* 74.

1.10.3.2 Supply options

In 2009, an amendment to the Threatened or Protected Species regulation (TOPS regulation) by the Minister of Water and Environmental Affairs put a moratorium in place on the domestic trade on rhino horns.[167] Two individuals challenged the moratorium on white rhino horns and held that the moratorium was irrational and an insufficient method of curbing rhino poaching.[168] The judge in the casein turn analysed the Minister's failure to comply with sections of the National Environmental Management Biodiversity Act 10 of 2004 (*NEMBA*) and set aside the moratorium on trade in rhino horn.[169] One of the most bizarre reasoning in the case is the judge's belief that the moratorium could be lifted because there is no domestic demand for rhino horn. This is purely speculative, as it has been proven beyond doubt that South Africans are involved in poaching. Corrupt individuals would surely seize the opportunity to get their hands on rhino horn domestically to trade the horn internationally for a higher profit.[170] Banning the trade of rhino horn (as an anti-poaching strategy) is widely scrutinised as black-market prices will rise, making poaching even more rewarding.[171]

1.10.3.3 Alternative economic choices for communities

It is easy for criminal syndicates to lure members of impoverished communities into rhino poaching activities. On the one hand it is beneficial for the foot soldier in that he will make a living and equally as beneficial to the leaders of the criminal syndicate – the masterminds rarely get convicted. One of the greatest challenges in South Africa is the high unemployment rate. Therefore, one can hypothesize that the creation of jobs and alternative choices for economic prosperity in rural communities,

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167 Kruger and another v Minister of Water and Environmental Affairs and Another [2016] 1 All SA 565 (GP) para 3.

168 Kruger and another v Minister of Water and Environmental Affairs and Another [2016] 1 All SA 565 (GP) para 47.

169 Kruger and another v Minister of Water and Environmental Affairs and Another [2016] 1 All SA 565 (GP) para 90.2.

170 Collins 2020 *European Journal of Law and Economics* 365.

171 Mogoshi *An analysis of enforcement of laws on rhino poaching in South Africa* 5.

especially those adjacent to the KNP is necessary in the fight against wildlife crime.[172] The literature on rhino poaching is full of alternative strategies to curb the problem. It is, however, crystal clear that many poachers become entangled in syndicates' schemes due to a lack of access to financial opportunities. Giving communities an equal share in the benefits of conservation practices, would be a step in the right direction. It could accelerate the process of creating job opportunities for community members in an effort to dissuade them from participating in dangerous, illegal poaching business.

The World Bank reports on the positive outcomes of income-generating activities for former poachers. Following relentless poaching in the Pendjari National Park in Benin, authorities developed a grant programme for local people to boost entrepreneurial income-generating activities. This has proven successful as poaching in the park decreased.[173]

1.10.3.4 A link with key driving factors

In linking long-term sustainability interventions with the key driving factors, one can see that creating sustainable demand and supply options probably address distant market drivers and do not really touch on inadequate law enforcement, unclear property rights or human-wildlife conflict. Considering alternative economic choices for communities addresses two driving factors, namely human-wildlife conflict and legal uncertainty around ownership rights. The main issue at the centre of both these drivers is the strenuous relationship between communities and conservation.

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172 DW 2018 https://www.dw.com/en/south-africa-to-stop-poachers-provide-them-with-an-alternative-income/a-45576582.

173 The World Bank 2017 https://www.worldbank.org/en/news/feature/2017/02/23/wildlife-poaching-decines-as-a-result-of-income-generating-activities.

1.10.4 Pillar 4: Game-changing interventions

1.10.4.1 Disruption of organised crime

In order to disrupt organised crime, it is important to understand the hierarchical structure within a criminal network. Syndicates comprise of intricate networks, usually in possession of the necessary capital and technology needed to make a lucrative business from poaching. Recruiting those from destitute circumstances seems to be an easy task as they are desperate.[174] The use of shell companies are central to the longevity of criminal networks as it hides the money trail. Criminal networks have also misused legal avenues such as trophy hunting. For instance, the infamous Thai citizen, Mr Chumlong Lemtongthai, hired prostitutes to pose as trophy hunters to hunt white rhinos.. At the time, a person could hunt one rhino per year. Mr Lemtonghtai's syndicate ensured that the prostitutes were given a holiday, and in turn, the rhinos were hunted under the supervision of a professional hunter, though the rhino horn was ultimately in possession of Mr Lemtongthai's syndicate.[175] This loophole led to a change in how the South African government issues hunting permits. Since,, applicants must now provide proof of hunting in their country of residence or proof of membership at a hunting organisation in their native countries. Additionally, authorities issuing the permits need to ensure that the hunters' countries of origin have adopted the necessary laws against the illegal wildlife trade.[176]

In an article, Ayling touches on the resilience of criminal networks. Criminal syndicates involved in wildlife trafficking are resilient in that they can withstand disruption and that they can effectively adapt to changes originating from attempts of disruption by legal entities trying to enforce law and order.[177]

South Africa has used a variety of strategies in combating organised crime amongst others; Increased penalties for poaching, better enforcement (more rangers in parks,

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174 Ayling 2013 *Journal of International Wildlife Law and Policy* 64.
175 Ayling 2013 *Journal of International Wildlife Law and Policy* 65.
176 Ayling 2013 *Journal of International Wildlife Law and Policy* 65.
177 Ayling 2013 *Journal of International Wildlife Law and Policy* 69.

introduction of canine units etc.), special enforcement operations (National Enforcement Blitzes, like operation Skhumba in South Africa) and science-based solutions (like dehorning, microchipping etc.). Their successes are debatable. Proposals to register private rhino horn stockpiles, a greater focus on involving communities in ecotourism (for sustainable, legal jobs) and bilateral agreements (with countries known to consume rhino horn, like Vietnam) have all sprouted from the desire to conserve and protect the rhino.[178] Continued resilience by syndicates are fuelled by intricate connections including the likes of professional hunters and veterinarians. [179]

1.10.4.2 Technology

Rhino poaching can not be fought with any stand-alone approach. The best way to combat wildlife trafficking is with an integrated, multi-faceted approach.[180] Dr Sam Ferreira (active in the scientific branch of SANParks) explored the alternative of chemical horn infusions and whether it would serve as a deterrent. The chemical infusion of rhino horn (on live rhinos) is thought to make the horn unusable and could be life-threatening for the end user. The horn is infused with an indelible dye and ectoparasiticides.[181] It is unknown whether chemical infusion would have the desired outcome of dissuading poachers.. The assumption is that the dye will render the rhino horn useless for ornamental use..[182] Because poachers are not the end-users of rhino horn, they might not differentiate between rhino with chemically infused horns and those without the infusion. Poaching may continue undisturbed. [183] Infusing rhino horns with a substance potentially harmful to the end user also poses a legal and ethical dilemma. Evidently, though chemical infusion is innovative – it is not a solution to the rhino poaching problem.

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178 Department of Fisheries, Forestry and the Environment 2019 https://dffe.gov.za/progressonimplementationofintegratedstrategicmanagementofrhinoceros.

179 Ayling 2013 *Journal of International Wildlife Law and Policy* 74.

180 Ferreira 2014 *Pachyderm* 54.

181 Save the Rhino 2012 https://www.savetherhino.org/thorny-issues/poisoning-rhino-horns/.

182 Ferreira 2014 *Pachyderm* 55.

183 Dube 2011 https://www.sanews.gov.za/south-africa/poisoned-rhino-horn-wont-deter-poaching-kruger.

1.10.4.3 Empowering local people

Due to their proximity to government-owned conservation areas, members of impoverished rural communities easily partake in illegal poaching activities. [184] These communities on the outskirts of civilisation (such as these communities living in and next to national parks) are last in line to benefit from social and economic development programmes and suffer from a lack of infrastructure. Involvement in poaching can be seen as a response to historical inequality, loss of ancestral land and a demand for development and opportunity.[185] It would be beneficial to explore options where communities are empowered to assist in the fight against wildlife crime.

1.10.4.4 A link with key driving factors

The disruption of organised crime can definitely be linked to inadequate law enforcement strategies. This topic is discussed in more depth in Chapter 6. The disruption of organised crime is necessary to properly address the poaching crisis, as it is mostly 'foot soldiers' who are brought to justice and rarely the master minds of criminal syndicates.

There are many technological advances that can aid law enforcement in the performance of their duties. Empowering local people is a great strategy to address legal uncertainty about property rights and to fight the underlying causes of a prevalence to poach such as poverty, forced removals, and little to no economic opportunity.

1.11 Summary

The four pillars of the National Integrated Rhino Strategy are multi-faceted. Some interventions have been successful, while others have not. The first pillar of the strategy, compulsory interventions, includes arrests and prosecutions. It is well known that the *KNP* is the national park that is targeted most. Though the Skukuza

184 Hübschle 2016 *Global Initiative* 2.
185 Hübschle 2016 *Global Initiative* 2.

court has been successful in denying bail applications and convicting poachers, poaching continues. This shows that criminal networks have to be disrupted. Proactive anti-poaching efforts aim to disrupt organised criminal networks. A responsive legislative framework (such as the *NEMBA* and *NEMPAA*) all contribute to the fight against poaching. However, in addressing the key driving factors of poaching (in this case inadequate law enforcement), one can argue that the magnitude of legislation makes practical implementation difficult. This calls for a more practical, compressed and digestible guideline to address poaching.

The second pillar, which refers to interventions to increase rhino numbers, includes strategic removals, which have been successful. No translocated rhinos have been poached. Even though sanctuaries, conservancies, and strongholds can deter criminals, these facilities and added security measures lead to high costs. Whether conservation husbandry is successful is debatable. Conservancies that include communities in their management and operations (like those in Namibia) will address the issue of unclear property rights by rectifying the strained relationship between communities and conservation efforts.

The third pillar, long-term sustainability interventions, aims to create a sustainable demand for rhino horn markets. This could be profitable and save the lives of many rhinos. Different supply options and alternative economic choices for communities fall under this pillar. Providing work opportunities for local communities to dissuade them from participation in illegal activities could have positive long-term effects – a direct response to unclear property rights as a key driving factor.

Lastly, the fourth pillar includes game-changing interventions. These aim to disrupt organised crime (addressing inadequate law enforcement as a key factor). Organised crime is one of the root causes of the rampant rhino-poaching problem, local people should be equipped to withstand enticement into the schemes of criminal syndicates (a response to unclear property rights and underlying issues such as forcible removals, poverty and little to no economic opportunity).

It is notable that the majority of the sub-strategies of the National Integrated Rhino Strategy aims to address inadequate law enforcement, but still poaching continues. The strategy of disrupting organised crime, though it forms part of the Integrated Rhino Strategy, has not reached its full potential (as evident from the literature, to be discussed further in Chapter 6). Few strategies are directed at addressing legal uncertainty surrounding property rights and human-wildlife conflict. This is a void that can be explored further. Chapter 6 looks at addressing past and present social injustices (as a response to legal uncertainty around property rights).

Chapter 5
Legal framework for addressing poaching

5 DO NOT DELETE!!

1.12 Introduction

Chapter 4 explored the multi-faceted pillars of the Integrated Rhino Strategy and pinpointed the successes, failures and pitfalls of anti-poaching efforts. Under the first pillar, a responsive legislative framework can address one of the main key driving factors within South Africa's control, namely inadequate law enforcement.

This chapter offers an exposition of the main national, regional and international legislation, strategies and conventions aimed at conservation, anti-poaching and wildlife trafficking to ascertain whether they are successfully implemented and practically executable.

Firstly, the national provisions and legislation will be discussed and thereafter, the regional and international regulations.

1.13 International, regional and national legal principles and legislation on poaching

1.13.1 National legislation, regulations and strategies

1.13.1.1 The Constitution of the Republic of South Africa

The 1996, the South African Constitution envisaged legislative and other reasonable measures to ensure the ecologically sustainable development and use of natural resources so that it would benefit present and future generations.[186]

It is clear that poaching and illegal trade in wildlife is unsustainable and will exhaust the natural resource. There is an onus on the current generation to ensure the protection of the rhino in line with the constitutionally entrenched right captured in section 24. Should the rhino go extinct, it would be of no benefit to present or future

[186] S24 of the Constitution of the Republic of South Africa, 2016.

generations. What makes section 24's inclusion in the Constitution so special, is the fact that it strengthens environmental law nationally as it makes a sustainable environment one of the fundamental human rights.[187]

1.13.1.2 National Environmental Management Act 107 of 1998 (NEMA)

NEMA's preamble corresponds with section 24 of the Constitution as it reiterates that everyone has the right to have their environment protected through legislative and other measures to 1.) promote conservation, and 2.) sustainably use natural resources.[188] The preamble goes further by saying that the law should establish procedures to facilitate and promote co-operative government and strengthen intergovernmental relationships. The law should also be used in such a way that public participation in environmental governance is promoted.[189] Rhino poaching is undoubtedly an issue to be addressed by *NEMA.* Saving the rhino from extinction and extortion is a conservation effort and an attempt to use a natural resource sustainably. There is a great onus on the state to protect the constitutionally enshrined environmental right. Rhino poaching is a direct infringement on section 24(b)(ii) as natural resources should be used sustainably to benefit present and future generations.[190]

NEMA empowers the minister to introduce legislation or regulations that give effect to international environmental legislation and agreements by creating offences and penalties for non-compliance.[191] *NEMA* also makes provision for an Environmental Management Inspectorate (EMI), empowered to issue notices should persons/organisations be non-compliant. Though they cannot prosecute, EMIs are able to investigate and seize items.[192] Section 33 of *NEMA* also provides for private prosecution and section 34 makes provision for criminal proceedings to be instituted

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187 De Wet *The South African regulatory framework relating to illegal trade in rhino horn* 32.
188 Preamble of *NEMA*.
189 Preamble of *NEMA*.
190 De Wet *The South African regulatory framework* 32.
191 S25(3)(g) of the National Environmental Management Act, 107 of 1998.
192 De Wet *The South African regulatory framework* 33.

against infringers of Schedule 3 (which includes environment conservation, animal protection and national parks) – all relevant to the rhino conservation effort.[193]

1.13.1.3 National Environmental Management: Biodiversity Act 10 of 2004 (*NEMBA*)

NEMBA puts s24 of the Constitution into perspective by confirming the State's trusteeship of biological diversity and the use of the act to manage, conserve and sustain biodiversity and genetic resources.[194]

NEMBA aims to protect species and ecosystems and advocates for the sustainable use of indigenous resources.[195] The objectives as set out in section 2 are focussed on the management and conservation of biodiversity, on giving effect to ratified international agreements and on ensuring co-operative governance.[196] Furthermore, section 56 has an important provision, authorising the Minister to issue a list of protected and endangered species (the ''TOPS'-list, which is discussed later).[197] Section 57 of *NEMBA* describes the instances where a person may not carry out a restricted activity without a permit, including the prohibition of hunting, catching, searching, luring, capturing, killing, etc. of the species.[198] Those infringing upon the requirements as set out by the act are subject to the penalties envisioned by section 102 – fines and/or imprisonment not exceeding five years. In calculating the fine, the court should take the greater amount between either the amount published in the Adjustment of Fines Act of 1991, or the commercial value of the specimen in question times 3.[199] (This can amount to R5 million, and for subsequent infringements up to R10 million and/or 10 years imprisonment).[200]

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193 S33 and 34 of *NEMA*.
194 S3 *NEMBA.*.
195 Preamble of *NEMBA*.
196 S2(a)(i), 2(b), 2(c) of *NEMBA*.
197 De Wet *The South African regulatory framework* 37.
198 S57 of *NEMBA.*
199 S102(2)(b) of *NEMBA.*
200 De Wet *The South African regulatory framework* 39-40.

1.13.1.4 National Environmental Protected Areas Act 57 of 2003 (*NEMPAA*)

In accordance with the environmental right envisaged in the Constitution, *NEMPAA* aims to manage and conserve biodiversity and to sustainably utilise nature for the benefit of the people, all the while promoting ecology.[201] Another important provision in the act is section 38(a), which states that the minister may assign the management of protected areas to suitable persons, organisations or organs of state. The parliament of South Africa founded the South African National Parks (SANParks) in 1926 and they are the governing body for protected areas.[202] SANParks is tasked with promoting tourism, while being responsible for conservation and environmental protection.[203]

1.13.1.5 Criminal Procedure Act 55 of 1977 (*CPA*)

The *CPA* is limited in its influence on the prevention of illegal trade of rhino horn, though it does provide for a wider range of authorised persons to arrest guilty parties involved in illegal wildlife trade.[204] Section 20 of the *CPA* states that state authorities can seize anything by obtaining a warrant for seizure.[205] Apart from seizing rhino horn or rhino horn products, officials may also search the persons and premises mentioned in the warrant.[206] The act also provides for instances where police officers may search persons, containers or premises without a warrant should the official have reasonable grounds to believe that the delay of obtaining the warrant will defeat the purpose of the search.[207] This aids officials in obtaining evidence without a warrant before guilty persons can remove rhino horn or flee across borders.

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201 S2(c) and (e) of *NEMPAA.*

202 De Wet *The South African regulatory framework* 46.

203 SANParks date unknown .https://www.sanparks.org/conservation/people/all.php#:~:text=South%20African%20National%20Parks%20(SANParks,million%20hectares%20of%20South%20Africa.

204 De Wet *The South African regulatory framework* 47.

205 S20 of the *Criminal Procedure Act* 55 of 1977.

206 De Wet The South African regulatory framework 48.

207 S22(b)(ii) of the *CPA.*

Section 252A of the *CPA* also provides for specialised investigation techniques to set traps and make use of undercover operations.[208] This provision can be used to uncover criminal syndicates.

In addition to the sentences prescribed by *NEMBA*, charges of fraud, racketeering, poisoning and/or money laundering can be added to the charge sheet in terms of the *CPA,* depending on the facts of the matter.[209]

1.13.1.6 Prevention of Organised Crime Act 121 of 1998 (*POCA*)

Most crucial in the race to eradicate rhino poaching is the disruption of the organised crime and criminal syndicates at the centre of rhino poaching. *POCA* provides measures to combat organised crime and criminal gang activities. The preamble goes further and emphasises that the Constitution places a duty on the State to respect, protect and promote the rights envisioned in the Bill of Rights (whereunder s24 – the environmental right).

In the definition section of the Act, a 'criminal gang' is defined as a formal or informal, ongoing organisation or group consisting of three or more persons with an identifiable name or sign, with one of the organisation's main activities being the commissioning of a criminal offence and the members of the identifiable group engaging in patterns of criminal activity.[210]

Though the act provides for extradition in some instances, the practical execution of this provision is near impossible.[211] Nanima has written extensively on the dire need for the amendment of the *POCA* (which will fall under pillar 1 of the Rhino Strategy by providing for a responsive legislative framework). Amending this act will also be greatly beneficial in addressing one of the three local key driving factors, namely inadequate law enforcement.

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208 Cites Working Group Seventieth meeting of the standing committee: Species Specific Matters 23.
209 Cites Working Group Seventieth meeting of the standing committee: Species Specific Matters 23.
210 S1(iv) of the Prevention of Organised Crime Act, 121 of 1998.
211 Nanima 2019 *PER/PELJ* 1.

1.13.1.7Threatened or Protected Species Regulations (*TOPS*)

The Threatened or Protected Species Regulations (*TOPS* regulations) were promulgated in 2007. The aim of the regulations was to provide a standard for the protection of threatened and protected species. However the regulations have been criticised for the fact that compliance is almost impossible, and subsequently difficult to implement practically.[212]

There is friction and confusion as national biodiversity law permits provinces to have their own laws on poaching. The lack of congruence across provinces poses a problem as poachers are well aware of these loopholes.[213]

1.13.1.8 The National Integrated Strategy to Combat Wildlife Trafficking (2017 – Version 4) (*NISCWT*)

Wildlife trafficking and poaching is not an isolated conservation problem, it is a major threat to national security as well as poaching syndicates comprise sophisticated transnational organised criminal networks.[214] The main aim of the *NISCWT* is to empower national law enforcement agencies to reduce and prevent poaching within the borders of South Africa and beyond.[215] The *NISCWT* has three main objectives to aid the fight against wildlife trafficking, namely to improve law enforcement efforts and to adjudicate poaching as a transnational organised crime; to increase the government's ability to detect, prevent and combat wildlife trafficking; and to encourage cooperation and collaboration between national, regional and international law enforcement agencies.[216] As mentioned in Chapter 3, the fact that the *NISCWT* has not been adopted, is a missed opportunity.

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212 Mogoshi *An Analysis of Enforcement of Laws on Rhino Poaching in South Africa* 2.
213 Mogoshi *An Analysis of Enforcement of Laws on Rhino Poaching in South Africa* 3.
214 UNODC date unknown https://sherloc.unodc.org/cld/en/treaties/strategies/south_africa/zaf0001s.html.
215 UNODC date unknown https://sherloc.unodc.org/cld/en/treaties/strategies/south_africa/zaf0001s.html.
216 NISCWT 2017 13-14.

1.13.2 Regional strategies

1.13.2.1 The African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa

This strategy was concluded to create a balance between the trade of wild fauna and flora and socio-economic development in rural communities. More often than not the protection of conservation is synonym with economic opportunity. .[217] The strategy consists of seven sub-categories, including: An increase in political commitment, improvement of inter-regional cooperation, engagement with consumer states to reduce demand and supply, enhancing livelihoods through sustainable development, reducing the impact of wildlife crime on economic growth and stability, increasing public participation and providing information through technology.[218]

The magnitude of regional and international legal agreements concerns itself with conservation practices and strategies to combat rhino poaching. Though there exists this plethora of legal agreements, a major drawback is the multiplicity of treaties and subsequent fragmentation of the law. The lack of sufficient resources in African countries and impending poverty contributes to the downfall of well-written and well-strategised agreements..[219] The seven core objectives reiterates that regional cooperation is fundamental in curbing poaching. If African countries have no access to funds to implement these action plans and strategies, it paves the way for poachers to make use of these 'weakened' systems (for instance lack of control at borders, no field rangers, no technology, etc). It has been recorded that poachers released on bail flee to Mozambique. Since there is no extradition treaty between South African and Mozambique, some criminals go undetected and it is impossible to sentence them.[220] As the urgency to address inadequate law enforcement grows, including bringing organised syndicates to justice, the need for regional cooperation

217 Executive summary of the African Strategy on Combating Illegal Exploitation and Illegal Trade in Fauna and Flora in Africa (2015).

218 Part II, article 2.4. of the African strategy on combating illegal exploitation and illegal trade in fauna and flora in Africa (2015).

219 Erinosho 2013 *African Journal of International and Comparative Law* 379.

220 Collins 2020 *European Journal of Law and Economics* 369.

between states, especially South Africa and Mozambique, grows too. The development of a strategy to establish extradition treaties between states can strengthen the fight against organised criminals and especially those who make use of the porous border between the two neighbour states.

1.13.2.2 SADC Law Enforcement and Anti-Poaching Strategy (*The LEAP Strategy*)

Though the *LEAP Strategy* is mainly concerned with poaching of elephants, it makes mention of rhinoceros as well. According to the strategy law enforcement officials would address poaching through specialised training and technology. In the second place there is an emphasis on raising awareness – specifically reiterating the negative effects that poaching may have on economic development of communities. Lastly, the strategy also advocates strongly for the implementation of community-based initiatives to inspire community members to sustainably benefit from wildlife. [221]

The above recommendations of the *LEAP* strategy do touch on the key driving factors fuelling rhino poaching, namely inadequate law enforcement (that could be addressed through specialised training), unclear property rights (and the possibility of economic development) and human-wildlife conflict. Community-based interventions falls under the scope of pillar 4 of the National Rhino Strategy discussed in the previous chapter. This may be an underutilised opportunity.

1.13.3 International conventions

1.13.3.1 Convention on International Trade in Endangered Species of Wild Fauna and Flora (*CITES*)

Perhaps the most important multilateral international agreements are the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora . South Africa ratified the *CITES* Convention in 1975.[222] The main goal of the

[221] Article 2.4. of the SADC Law Enforcement and Anti-Poaching Strategy (2015).
[222] CITES date unknown https://cites.org/eng/parties/country-profiles/za.

convention is to control trade in fauna and flora to prevent extinction.[223] Countries that are party to the convention are obligated to incorporate provisions in their national laws to give effect to the goals of the convention. Since 1977, all species of rhino have been listed in Appendix I. The provision bans commercial trade in rhinos, including trophy hunting and trade in by-products.[224]

However, there is a magnitude of challenges. In the first place, there is a failure of government to enforce resolutions and policies effectively. Secondly, rhino horn smuggling is a specialised undertaking involving intricate networks of organised criminals. Thirdly, there is unwavering demand.[225] *CITES* itself does not propose methods to deal with organised criminals.

1.13.3.2 The United Nations Convention against Transnational Organised Crime (*UNTOC*)

The United Nations Convention against Transnational Organised Crime *(UNTOC*) applies to structured groups conducting criminal activity who have a 'degree of permanence, continuity of membership and a developed structure'.[226] This convention can be applied to organised criminals. Scholars, however, note that greater cooperation between nations and boundaries are needed to properly give effect to the provisions of the convention. Formal cooperation can be complex, making it ineffectual. In reality, these complex measures are replaced by informal, unilateral measures.[227]

1.13.3.3 Convention on Biological Diversity

South Africa has been a member state of the Convention on Biological Diversity since 2 November 1995.[228] The preamble of the convention reads that contracting parties

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223 Ayling 2013 *Journal of International Wildlife Law and Policy* 58.
224 Mogoshi *An analysis of enforcement of laws on rhino poaching in South Africa* 4.
225 De Wet *The South African regulatory framework* 19-20.
226 Ayling 2013 *Journal of International Wildlife Law and Policy* 68.
227 Dandurand and Jahn 2021 *The future of international cooperation against transnational organised crime* 5.
228 Centre for Environmental Rights date unknown https://cer.org.za/virtual-library/legislation/international-instruments/convention-on-biological-div

should be conscious of the ecological, economic, educational and aesthetic value (amongst others) of biological diversity. This links once again with the importance of saving the rhino as a species.[229] It also goes further in reaffirming that member states bear the responsibility to conserve biological diversity and to ensure the conservation of ecosystems and natural habitats and recovery of species in their natural surroundings.[230] The objective of the convention is to conserve biodiversity in a sustainable manner, with a focus on the fair and equitable sharing of benefits derived from conservation efforts.[231] The provisions of the treaty are not absolutely concrete, leaving wiggle room for interpretation and discretion by the member state.[232] Though the convention does not explicitly mention rhinoceros, they are included in South Africa's Biodiversity Management Plan that was drafted in response to the convention.[233]

Some researchers praise South Africa's implementation of article 6 of the convention, which requires that contracting parties develop national strategies, plans and programmes for conservation. The Regional Rhino Conservation Plan and the Conservation for Black Rhino Plan are good examples.[234]

1.14 Summary

It is clear that there have been definite attempts to address wildlife trafficking on a national, regional and international level. South Africa has a large body of national legislation and provisions that offer a foundation to address poaching and to bring criminals in contravention of those provisions to justice. Section 24 of the Constitution has sustainability at its core and gives effects to *NEMA*, an instrument that strives for the sustainable use of resources to benefit the present and future generations, and *NEMPAA*, which gives SanParks the authority to conserve.

ersity#:~:text=The%20Convention%20on%20Biological%20Diversity,Convention%20since%202%20November%201995.

229 Preamble of the Convention on Biological Diversity (1992).

230 Preamble of the Convention on Biological Diversity (1992).

231 A1 of the Convention on Biological Diversity (1992).

232 Janssens International *Wildlife Law and the Rhino* 53.

233 Janssens International *Wildlife Law and the Rhino* 57.

234 De Wet *The South African regulatory framework relating to illegal trade in rhino horn* 21.

Furthermore, *NEMBA* provides clear guidelines when imposing sentences, and the *CPA*, *Prevention of Organised Crime Act, TOPS,* and the *NISCWT* are all interlinked to acknowledge and subsequently deal with the rhino crisis.

However, in asking the question of how to innovatively apply law and policy to address rhino wildlife trafficking, one can point out that local acts provide for conservation and the protection of biodiversity, but there may be reason to amend the *POCA.* In doing so and in exploring inter-regional strategies aimed at extradition, specifically between South Africa, Mozambique and Vietnam, the issue of the current inadequate law enforcement might just be addressed properly. Even though many of the pillars of the National Rhino Strategy come back to adequate law enforcement, it has not had a great success rate. Perhaps this is an unexplored avenue.

On the regional level, the *African Strategy on Combating Illegal Exploitation and Illegal Trade of Fauna and Flora in Africa* as well as the *LEAP strategy* provide for the protection of rhino, though better cooperation between states are needed. One of the pitfalls of these strategies are also that they are difficult to implement practically.

International conventions such as *CITES, UNTOC,* and the *Convention on Biological Diversity* bound member states to implementing plans to combat wildlife trafficking to protect and conserve biodiversity, curb transnational organised crime, and ultimately, save the rhino. Unfortunately, without proper cooperation between the three states at the centre of the rhino poaching problem, the provisions of the international conventions are mute.

Chapter 6
Analysing and applying innovative strategies to curb rhino poaching

6 DO NOT DELETE!!

1.15 Introduction

The previous chapter delved deeper into some of the different national, regional and international legal frameworks that support the fight against rhino poaching. It is clear that there is a framework for the protection of biodiversity, though there are a few areas that require attention and improvement. In summary: South Africa needs extradition treaties to disrupt organised crime.

Addressing the key driving factor of inadequate law enforcement requires a focus on the disruption of organised crime. This chapter considers the definition of organised crime, the link between organised crime and rhino poaching, and ways to disrupt organised crime and syndicates involved in poaching.

Secondly, this chapter looks at addressing the local key driving factor of uncertainty about ownership rights by rectifying past and present social injustices. A brief overview of the historical relationship between conservation and community follows, whereafter the role communities play in poaching and steps to be taken to rectify past and present social injustices are discussed.

1.16 Disruption of organised crime

1.16.1 Defining organised crime

Though there is no universal definition to describe organised crime, sources agree that it is not random and unplanned, but rather planned, rational acts of criminality with the purpose to gain financial profit.[235] The criminal network includes persons

[235] UNODC date unknown https://www.unodc.org/e4j/zh/organized-crime/module-1/key-issues/defining-organized-crime.html.

who work together on a continuing basis to reach their goals.[236] The best definition of an organised criminal group can be extracted from the UN Convention against Transnational Organised Crime. Here it is defined as a structured group including three or more persons for a period of time, during which the persons act in concert to commit one or more serious offences from which they directly or indirectly benefit, either materially or financially.[237]

South Africa seems to be a hotspot for organised crime, specifically drug and arms trafficking and environmental crimes.[238] Intricate criminal networks that include groups, gangs, state-embedded criminals and foreign actors, use local networks. They do not only take part in the poaching and smuggling of rhino horn, the trafficking of lion bones, ivory, abalone and pangolin is also on the rise.[239]

The continuing rise in organised crime contravenes the aims of the acts and conventions discussed in Chapter 5. Not only is biodiversity challenged by such illegal networks, but also the national security of a state where organised criminals flourish. Unfortunately, South Africa's state security is under threat. National security includes the safety and stability of a state. The reason why organised crime is so dangerous to national security, is that it brings about destabilisation and has close ties to terrorism.[240]

1.16.2 Organised crime and rhino poaching

There is an undeniable link between rhino poaching and other criminal economies.[241] In pondering the question of how to disrupt organised crime relating to rhino

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236 Kirby and Snow 2016 *Trends in Organised Crime* 1.

237 A2(2) of the UN Convention against Transnational Organised Crime and the Protocols thereto (2004).

238 Businesstech 2021 https://businesstech.co.za/news/trending/525268/south-africa-is-a-global-hotspot-for-these-types-of-crimes/.

239 Businesstech 2021 https://businesstech.co.za/news/trending/525268/south-africa-is-a-global-hotspot-for-these-types-of-crimes/.

240 Yeung 2016 *Research Gate* 1-3.

241 Rademeyer and Shaw 2021 https://www.dailymaverick.co.za/article/2021-09-21-saving-rhinos-is-a-litmus-test-for-tackling-organised-crime-and-corruption-in-south-africa/.

poaching, one can refer to disrupting organised crime in general.[242] Criminal syndicates in South Africa are highly organised and use advanced technologies to poach. More often than not, these operations include the skills of trained veterinary professionals and hunters and the use of weaponry such as AK47s and .375 and .458 calibres. This shows that these are not random, opportunistic poachers, but criminals who form part of an organisation with the means and connections to attract professionals.[243]

These organised crime groups are usually not only concerned with the trafficking of rhino horn, but are involved in other illegal activities as well; apart from smuggling items like abalone and lion bone, they are also involved in the trafficking of diamonds and illegal substances.[244]

These organisations have intricate hierarchical networks, and some scholars suggest that key individuals in these organisations have close ties with syndicates operating in Southeast Asia.[245] The upsurge of interest in rhino horn in Vietnam has served as the inspiration behind pseudo-hunting operations to obtain rhino horn, as well as the involvement of South African conservation officials and Vietnamese embassy personnel.[246]

1.16.3 How to disrupt organised crime and syndicates

The disruption of organised crime can be summarised as using flexible and dynamic tactics to make an environment hostile for the organised criminal group.[247] Whereas crime prevention focuses on the crime itself, disruption focuses on the offender and disrupts his usual flow of criminal business.[248]

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242 Rademeyer and Shaw 2021 https://www.dailymaverick.co.za/article/2021-09-21-saving-rhinos-is-a-litmus-test-for-tackling-organised-crime-and-corruption-in-south-africa/.
243 Montesh *Rhino poaching: A new form of organised crime* 2.
244 Milliken and Shaw *The South Africa-Vietnam rhino horn trade nexus* 76.
245 Montesh *Rhino poaching: a new form of organised crime* 7.
246 Milliken and Shaw *The South Africa-Vietnam rhino horn trade nexus* 76.
247 Kirby and Snow 2016 *Trends in Organized Crime* 2.
248 Kirby and Snow 2016 *Trends in Organized Crime* 2-3.

Disrupting organised crime is a difficult and complex matter. De Menin, for instance, writes that selling rhino horn from a central selling organisation will support law enforcement while undermining illegal poaching activities. At the moment, law enforcement efforts are too weak to successfully disrupt organised crime. One option is policy reform to dissuade criminals with higher fines (though this option has been criticised) and asset forfeiture.[249]

Kirby and Snow provide a summary of what is needed to disrupt organised crime:

1. Increased effort should be needed to commit the offence;
2. There should be an increased risk of detection;
3. There should be a reduction in rewards derived from committing the offence and;
4. Removing provocation (the excuses related to the commission of the offence).[250]

One of the best proposed methods to disrupt organised crime is through a partnership approach, though this deems to be very difficult.[251] Legislative tools in the United Kingdom, including travel restriction orders, financial reporting orders and serious crime prevention orders, have proven to be somewhat successful.[252]

One of the pitfalls of using the disruption method is that it poses some serious ethical questions. The method relies on intrusiveness and coerciveness.[253] In a country like South Africa where there is high regard for the Bill of Rights, intrusions on privacy can pose a problem when implementing this method. It boils down to a fight between human rights, the environmental right (to promote conservation) and the inherent right to human dignity and privacy.[254]

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249 De Menin et al 2014 *Conservation Biology* 8.
250 Kirby and Snow 2016 *Trends in Organized Crime* 3.
251 Kirby and Snow 2016 *Trends in Organized Crime* 4.
252 Kirby and Snow 2016 *Trends in Organized Crime* 4.
253 Kirby and Snow 2016 *Trends in Organized Crime* 14.
254 See sections 10, 14 and 24(ii) of the Constitution of the Republic of South Africa, 1996.

1.16.3.1 Greater punishment

The discipline of criminology proposes two relevant theories related to criminality: the rational choice theory and the deterrence theory. The former describes rational choice as a conscious decision-making process where the individual weighs the costs and benefits of the intended criminal activity. The deterrence theory assumes that crime can be deterred if the negative consequence of the crime outweighs the benefits that could be derived from involvement.[255] Filteau writes that there are two ways to deter a poacher; through indirect experience with punishment (knowing that breaking the law will get you in trouble) and direct experience with crime and punishment (punishment for a crime will deter the criminal from committing future offences). However, evidence shows that punishment creates defiance.[256] This corresponds with the views of other academics who believe in 'less law, more order', suggesting that investing in youth, neighbourhoods and the future (basically addressing the underlying causes of involvement in crime) is more of a deterrent than punishment. More on this subject in the paragraphs below.[257]

1.16.3.2 Infiltrating and disrupting the upper echelons of criminal networks

Disrupting organised crime is challenging because there have been few attempts to codify the methods to do so.[258] There is a need to disrupt the criminal organisation's networks, lifestyle and routines.[259]

Persons arrested and convicted of poaching are mainly 'foot soldiers'. These convicted poachers are arguably not part of the intricate network of organised criminals behind the poaching operations and therefore, poaching continues undisturbed.[260] Bringing the 'masterminds' and essential role players in organised groups to justice might just be the way to disrupt organised crime in general.

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255 Akers 1990 *Journal of Criminal Law and Criminology* 654.
256 Filteau 2012 *International Journal of Rural Criminology* 240.
257 Waller *Less law, more order* 1.
258 Kirby and Snow 2016 *Trends in Organized Crime* 2.
259 Kirby and Snow 2016 *Trends in Organized Crime* 2.
260 Polley 2014 https://conservationaction.co.za/media-articles/mpumalanga-community-calls-for-harsher-sentences-against-public-servants-involved-in-rhino-poaching/.

Many sources reiterate that the gangs responsible for the actual poaching and slaughtering of rhino are not the ones in leadership roles in the upper hierarchies of an organised syndicate. Nanima emphasises that there is a prosecutorial gap; the successful conviction rates relates replaceable individuals, easily persuaded by financial motivations. The leaders of these activities are rarely brought to justice.[261]

Syndicates in the illegal wildlife trade, specifically relating to rhino poaching, operate in three main countries. Firstly, the Kruger National Park in South Africa houses the largest rhino population in the world.[262] Here, poachers obtain rhino horn, where after the leaders of the syndicates organise transportation of the prized product, mostly into Mozambique and then to Vietnamese kingpins.[263]

It is known that the porous border between the Kruger National Park and Mozambique poses a great threat to rhino conservation. There are many factors that motivate criminals who come from Mozambique to poach across the South African border, including the lack of law enforcement, the fact that poaching is but a misdemeanour in Mozambique and the eagerness of impoverished local villagers to get some sort of monetary reward for their pursuits.[264]

The third country that plays a vital role in the ongoing illegal trade of rhino horn is Vietnam. Presumably, from Mozambique, role players distribute rhino horn to its consumers based in Asian countries for use as traditional medicine and for ornaments carved from rhino horns.[265]

Through the *Prevention of Organised Crime Act,* South Africa aims to address and curb the unlawful activities of organised criminals. The preamble agrees that it is difficult to bring leaders of criminal gangs to justice, as they are not the ones

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261 Nanima 2016 *African Journal of Legal Studies* 231-232.
262 Helping Rhino date unknown https://www.helpingrhinos.org/rhinostrongholds/.
263 Nanima 2016 *African Journal of Legal Studies* 227.
264 Save the Rhino 2013 https://www.savetherhino.org/thorny-issues/mozambiques-role-in-the-poaching-crisis/.
265 Nanima 2016 *African Journal of Legal Studies* 227.

performing the activities themselves, though it is important to criminalise the management of these illegal, gang-related activities.[266]

Rhino poaching is an interesting phenomenon as it is not particularly an international crime, though it involves international role players. It can be seen as a transnational crime, which requires the cooperation of the states involved.[267] Though the *Prevention of Organised Crime Act* provides a scope within which to deal with organised crime, it does lack in provisions for extraterritorial jurisdiction.[268] As is evident from the paragraphs above, extraterritorial extradition would be most useful in the fight against wildlife crime as criminals easily disappear into the safety of Mozambique and Vietnam.

Extraterritorial jurisdiction can be based on the coinciding interests of states. Should South Africa apply extraterritorial jurisdiction, it would not undermine another state's sovereignty. Instead it will be an act of interdependence.[269] The fight against wildlife poaching cannot be successful without the symbiotic relationship between two or more states.

1.16.4 The desired outcome of disruption

Undermining organised crime by for example selling a quota of rhino horn under a centralised organisation, can link well with the second part of the plan, i.e., addressing past and present social injustices. Yields from rhino horn harvesting can be invested in human and economic development programmes to empower and uplift communities prone to poaching, especially communities in Mozambique.[270]

The disruption of criminal networks will be greatly beneficial in that the higher echelons of criminal syndicates will be brought to justice, thus causing substantial interference with the day-to-day activities of these delinquent groups. Once the

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266 Preamble of the Prevention of Organised Crime Act, 121 of 1998.
267 Nanima 2019 *PER/PELJ* 23.
268 Nanima 2019 *PER/PELJ* 23.
269 Nanima 2019 *PER/PELJ* 31.
270 De Menin et al 2014 *Conservation Biology* 8-9.

kingpins as opposed to the 'foot soldiers' are brought to justice, one can hypothesise that poaching will be brought to a screeching halt.

1.17 Addressing past and present social injustices

1.17.1 A brief overview of past and present social injustices

Since the proclamation of the Kruger National Park to create a safe space for wildlife, communities living within the border of the park were forced off ancestral land. They are to this day excluded from conservation benefits.[271] A contentious issue is the displacement of peoples to make space for development, and in this case specifically the reorganisation of space to expand the boundaries of the land earmarked for conservation.[272] South Africa's history is laden with inequal ownership patterns; and the dispossession of rural communities to make room for the protection of wilderness is a major contributor to the poaching issues we face today. Data shows that black communities only steward about 0.5% of the black rhino population.[273]

Economic marginalisation is another factor that causes friction between officials advocating for conservation and the local communities living in poverty due to historical displacement, dispossession and the fight to gain economic freedom, albeit through means of participation in illegal wildlife activities.[274]

1.17.2 The role communities can play in curbing rhino poaching

A community can be defined as a group of persons whose rights in land are derived from shared rules determining access to land, held in common by such group.[275]

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271 Westby-Nunn 2018 https://www.dailymaverick.co.za/article/2018-12-04-one-of-the-biggest-drivers-of-rhino-extinction-is-social-inequality/.

272 Sinthumule *Development and Society* 47:2 262.

273 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 7.

274 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 12.

275 Averweg and Leaning 2018 https://www.derebus.org.za/revisiting-the-term-community-in-the-south-african-context/#:~:text=The%20term%20community%20is%20defined,Elambini%20judgment%20cites%20this%20definition.

Scholars found that community-based incentives where local communities are given control over wildlife resources can act as a relatively successful deterrent. It can dissuade subsistence poachers and inspire communities to report illegal wildlife trafficking.[276] The CAMPFIRE project in Zimbabwe and incentives from the Lowveld Rhino Trust are evidence of the success that community-centred projects can yield.[277] The alleviation of poverty in rural communities through community-based incentives are crucial; through the legal and sustainable utilisation of wildlife, communities can be uplifted and subsequently remove themselves from criminal schemes.[278]

Conflict over access to resources, benefits and land lie at the centre of the rhino crisis.[279] Scholars contend that communities living adjacent to or in conservation areas are the agents of the change needed to curb wildlife trafficking. The community resilience approach can render rhino poaching supply chains and networks useless as communities pull out and no longer support illegal activities.[280] Community engagement plays a vital role in the prevention of crime.[281]

1.17.3 Steps to take to rectify social injustices to serve as deterrent from involvement in organised crime and poaching

Addressing the rhino-crisis requires addressing historical injustices. In restoring the relationship between wildlife in areas of conservation and communities most affected by removal from conservation areas, one can hope to be a step closer to a long-term, sustainable solution.

The CITES Draft decision on engaging rural communities in the CITES process (24 September-5 October 2016) stipulates that community-based incentives should provide support to local peoples with regard to conservation. This should include the

276 Duffy, Emslie and Knight 2013 *Evidence on demand* 18.
277 Duffy, Emslie and Knight 2013 *Evidence on demand* 18.
278 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 11.
279 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 4.
280 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 4.
281 Schreurs *et al* 2020 *IDRiM Journal* 71.

right of rural communities to be consulted as equal partners when it comes to conservation.[282]

At the CITES Eighteenth Meeting of the Conference of Parties in Colombo (Sri Lanka), there was a discussion about the participatory mechanism for rural communities. This is a significant step in ultimately combatting wildlife crime with communities' assistance. Article 3 makes it clear that rural communities are essential stakeholders in conservation worldwide. Unfortunately, community participation in decision-making processes have been neglected. Additionally, there is a conflict between the rights of peoples over the rights of wildlife.[283]

Criminologists who focus on eco-crimes should consider the application of the community engagement theory to the risk of crime.[284] Usually, this theory is applied to communities' engagement in times of natural disaster, though scholars suggest it can be applied to the prevention of crime, and in this instance, the prevention of poaching.[285] This theory rests on the assumption that communities should know (and possibly already know) where culprits are and that they can inform police accordingly (then again, application rests on the assumption that the police will react on information provided before poaching occurs. Whether the SAPS will be able to react accordingly and within an adequate timeframe is debatable).

At this stage of the research, it is undisputed that communities are the missing links in saving wildlife and bringing about significant change.[286] In learning from community-based initiatives from African and Asian countries, South Africa can gather useful information on the success and failures of community participation programmes.

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282 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 11.
283 Article 3 CoP 18 Doc 17.3.
284 Schreurs *et al.* 2020 *IDRiM Journal* 72.
285 Schreurs et al. 2020 *IDRiM Journal* 72.
286 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 6.

1.17.3.1 Learning from other community-based initiatives

There have been flagship projects across that world aimed at correcting historical disadvantaging policies related to conservation. One such a strategy is the programme in Zimbabwe. CAMPFIRE's goal was to share the benefits of wildlife-related activities (tourism, trophy hunting, etc.) with local communities.[287] However, even though a recorded 52% of profits had been shared with communities and elephant poaching did decline, a vast array of challenges plagued the programme. Unfortunately the targeted local communities were not the main beneficiaries of the programme, international and local tourism companies profited most.[288] Bad management and corruption resulted in only a small number of people being employed by the CAMPFIRE initiatives.[289] Information gathered from studies suggests that transparency in income allocation and management practices are necessary for the continued existence and eventual success of the programme.[290] Even though the CAMPFIRE programme is not perfect, it has served as a blueprint for other initiatives across the globe, especially the creation of community conservancies in Namibia.[291]

Community conservancies in Namibia is built on the foundation of community-based natural resource management. Historically, people and wildlife were separated. After Namibia gained independence, wildlife populations dwindled drastically as communities took to poaching in response to having no rights to use wildlife. Conservationists addressed the problem by offering communities a sense of ownership, which in turn encourages sustainable use of natural resources.[292] As with any project, there have been challenges and victories. As of 2017, 190 000 Namibians benefitted from the approximately 82 registered conservancies by deriving income from hunting and tourism. Unlike CAMPFIRE, there were no third parties and middlemen and communities are able to benefit directly through a magnitude of

287 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 20.
288 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 20.
289 Tchakatumba et al 2019 *Ecosystems and People* 126.
290 Tchakatumba et al 2019 *Ecosystems and People* 127.
291 Hübschle and Shearing 2018 *The Global Initiative Against Transnational Organised Crime* 21.
292 Community Conservation Namibia *Living with wildlife* 4.

permanent and part-time employment opportunities.[293] Namibia also houses the largest population of free-roaming black rhino in the world.[294]

Unfortunately, the longevity of the conservancies has been questioned as they are reliant on donor support. It has been noted that accountability and transparency, much like the CAMPFIRE programme, is problematic. Benefits more often than not do not reach the most vulnerable.[295] Other challenges include inappropriate land use, mismanagement and insufficient recognition of the value of wildlife.[296]

It goes without saying that any project or initiative will have positives and negatives, though the onus is on the state implementing the programme to learn from mistakes. Communal conservancies are praised worldwide and delegations from all over, including Nepal and Mongolia, went to Namibia to learn about the communal conservancies.

Rhinos in Nepal are equally vulnerable to consumer markets in China and Vietnam.[297] The Chitwan National Park in Nepal houses about 94% of all rhinos in the country.[298] Similar to the historical forced removals of tribes from the KNP, the Chitwan National Park was formerly home to the Tharu peoples. From the 1980s to the 1990s, community-based conservation programmes were initiated as part of Nepal's Buffer Zone Management to include local communities and create a system of revenue sharing.[299]

It is clear that collaboration with local communities is essential in achieving conservation success. This section mentions three different programmes from countries with rhino populations. It would be advisable to learn from other countries' successes and failures to create a like-minded community-based system in South Africa.

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1.18 Summary

When applying innovative strategies to curb rhino poaching, one should aim to address the key driving factors behind poaching.

Firstly, in addressing inadequate law enforcement, one should look at the disruption of organised crime. South Africa is a hotspot for environmental crimes and these crimes link with many other types of organised crime. In order to disrupt organised crime, it is necessary to create a hostile environment for syndicates, though it seems at this stage that law enforcement in South Africa is too weak to successfully implement such strategies. Though difficult, a partnership approach is the way forward. There should also be greater punishment. Ultimately, infiltrating the upper echelons of criminal networks and bringing 'masterminds' to justice will cause the most disruption.

Secondly, in order to address legal uncertainty about ownership rights, it would be wise to address past and present social injustices. Historical dispossession and forced removals from areas earmarked for conservation still contribute to attitudes toward conservation efforts. In focussing on communities as the missing links between conservation and poaching and initiating properly managed and transparent community-based incentives, one can work towards rectifying past and present marginalisation of communities in need of economic opportunity. South Africa will greatly benefit from dissecting the successes and failures of other community-based incentives like CAMPFIRE, community conservancies in Namibia and collaboration in Chitwan National Park in Nepal.

Chapter 7
Conclusion and recommendations

7 DO NOT DELETE!!

This chapter draws conclusions from the research and makes recommendations on the way forward.

Preventing poaching is an intricate and multi-faceted undertaking. Law and policy should be applied innovatively to mend the strained relationship between conservation and community. Evidently there is a battle of resources; on the one hand we have poverty-stricken communities and on the other hand we have rhinos on the brink of extinction equipped with their own doctors, land and security guards.

In considering the importance of saving the rhino as a species, one should consider the importance of biodiversity in general. Biodiversity is important for the longevity of healthy ecosystems, cultural heritage, tourism, the creation of jobs, economic development and the alleviation of poverty in rural communities. The history of conservation vs poaching is interesting, and many lessons can be learned. One thing is certain, the resilience of criminal networks in South Africa poses a problem. Imprisonment has not been as great a deterrent as conservationists had hoped. In applying law and policy to curb poaching, there should be a bridge between conservation and economic development: these are not stand-alone issues.

This study identified the local key driving factors and pinpointed that inadequate law enforcement, legal uncertainty about ownership rights and human-wildlife conflict are the three local factors that are within South Africa's control. Law enforcement is complicated by the fact that park rangers and conservation officials have a strained relationships with communities due to their militarised approach. The fact that the NISCWT was never adopted may have been a missed opportunity. The lack of extradition treaties/ agreements between main role players (South Africa, Mozambique and Vietnam) is also detrimental to the cause.

The legal uncertainty about ownership rights is complicated by the tragedy of the commons and broken relationships due to historical forced removals. The option of privatising ownership has been discussed and it is clear that law and policy should make provision for communities to take ownership of wildlife so that they ultimately benefit from the protection of wildlife. Human-wildlife conflict was discussed to a lesser extent, although the discussion shed light on the fact that there is a strained relationship between communities and conservation (albeit park rangers or wildlife) and that retaliatory killings often result from this.

Preventing poaching through innovative strategies is not a new effort. Chapter 4 reflected on the successes and failures of the current anti-poaching strategy by discussing the four pillars of the Integrated Rhino Strategy. The study suggests that there are underdeveloped and underutilised strategies under pillar 3 and 4 specifically. Under long-term sustainability interventions, one can further explore the avenue of alternative economic choices for communities. Under the pillar of game-changing interventions, the disruption of organised crime and the empowerment of local people are the way forward.

The legal framework for addressing poaching is vast and far-reaching, though there are steps to be taken locally as well as on a regional/international level to strengthen strategies to prevent poaching. Firstly, international and regional provisions are often impractical and implementation is near impossible. Cooperation between countries also poses a problem. Secondly and on a local level, there is a need to amend POCA to provide for extradition between the three key countries implicated in rhino poaching.

Two main avenues can bring relief to those working tirelessly to prevent poaching: the disruption of organised crime and addressing past and present social injustices. Communities are the missing link that can stand between poachers and conservation. Given the need of economic opportunity, conservation can provide employment for communities. This can be achieved by learning from other countries' failures and

successes and applying an innovative approach to involve communities in the decision-making process to give effect to the community-based approach.

It is not too late to save the rhino, but immediate action is needed to save the species while at the same time addressing a major problem in South Africa: organised crime. Tapping mere foot soldiers on the wrist is not an effective mechanism to prevent poaching. The time has come to use the available technology and resources, and to amend acts and strengthen cooperation between states to allow for extradition so that we can disrupt criminal networks by bringing the real culprits to justice. Without addressing the factors mentioned above, rhinos will surely go extinct and criminal syndicates will continue their daily operations undisturbed.

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ANNEXURE: DECLARATION OF LANGUAGE EDITING

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DECLARATION

I, Christina M.E. Terblanche, hereby declare that I edited the academic article titled:

Preventing poaching: Innovative strategies in the fight against wildlife crime

for **B Bertolini** for submission as a research study for examination.

Changes were indicated in track changes and implementation was left up to the author. The editor did not view the final document.

Regards,

CME Terblanche

Cum Laude Language Practitioners (CC)

South African Translators Institute accr nr: 1001066

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