

University of Cape Town: Institute of Marine and Environmental Law

Research Dissertation Title:

A horn of contention: An analysis of the viability of a legalised trade in rhino horn

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Programme: LLM in Environmental Law

Course Code: PBL5654W

Word Count (including footnotes): 22 271

Research dissertation presented for the approval of Senate in fulfilment of part of the requirements for the LLM in Environmental Law in approved courses and a minor dissertation. The other part of the requirement for this qualification was the completion of a programme of courses.

I hereby declare that I have read and understood the regulations governing the submission of LLM in Environmental Law dissertations, including those relating to length and plagiarism, as contained in the rules of this University, and that this dissertation conforms to those regulations.

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Abstract

Trade in rhino horn is currently banned in terms of CITES, however the last few years have seen the establishment of an illegal trade which supplies the growing demand for rhino horn through poaching. As a result, a rhino poaching crisis has developed in South Africa, this dissertation will seek to analyse the theories for and against the legalisation of trade as a method to address said crisis.

In addition to considering whether the legalisation of trade is the most viable option, this paper will explore how one would go about lifting the trade ban. The latter will involve looking at the proposal for trade to be submitted, as well as what such a trade might look like if such a proposal is successful.

Acknowledgments

An affectionate thank you to Mom and the rest of the family for their support, to Micha for her invaluable guidance, to Zak and Giselle for their proofreading patience, and to JP for so much of his time and tolerance.

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CHAPTER 1 - INTRODUCTION

The media is awash with reports of poaching gone out of control, while the South African public, and international community, is bombarded with gruesome images and disturbing accounts of dehorned corpses, disfigured rhinos and orphaned calves. The rising death toll, reports of violent clashes with poachers, and numerous arrests, bear testament to the booming illegal trade in rhino horn, in the wake of what has rapidly developed into a war for rhino.

The extensive impact of the poaching epidemic on the African Rhino population in South Africa is immediately becoming apparent. According to the IUCN's Species Survival Commission's (SCC) African Rhino Specialist Group, experts predict that rhino populations could start to decline in less than two years' if poaching continues to increase at the current rate.¹ In light of several ineffective attempts and approaches to remedy the situation it seems that the current legal framework and mechanisms designed to control poaching and the illegal trade are inadequate. The onslaught has seen the birth of several organisations solely focused on finding solutions to, and raising awareness of, the illegal rhino poaching. The poaching crisis has led authorities to declare rhino poaching a priority crime as announced by Water and Environmental Affairs Minister Edna Molewa at a Cabinet meeting on 28 February 2013, following on the decision taken by the National Joint Operations Centre (which is co-ordinated by the Directorate of Priority Crimes Investigations, otherwise known as the Hawks).² Yet the war rages on, marked by escalating violence,

¹ Milliken, T., Emslie, E., Talukdar, B. (2012) *African and Asian Rhinoceroses – Status, Conservation and Trade: A report from the IUCN Species Survival Commission (IUCN/SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP15) CoP16 Doc 54.2. Annex 2*, CITES Secretariat, Geneva, Switzerland at 9, available at <http://www.cites.org/eng/cop/16/doc/E-CoP16-52-02.pdf> accessed on 11 December 2013.

² The Department of Environmental Affairs 'Rhino poaching interventions and the position of South Africa to the 16th Conference of Parties of the Convention in International Trade in Endangered Species of Fauna And Flora (Cites)' available at https://www.environment.gov.za/content/rhinopoaching_interventionsandpositionofsa_16copofthecites accessed on 17 June 2013.

corruption and the increasingly senseless and indiscriminate slaughter of these animals.

At an international level rhino horn, much like elephant ivory, is subject to a trade ban implemented by the Convention on International Trade in Endangered Species (CITES)³ as of 1977 while a moratorium on trade operates at a domestic level.⁴ However, while this trade ban remains in place, poaching continues at unprecedented levels and shows no signs of abating. In spite of extensive anti-poaching efforts landholders are finding it increasingly difficult to protect their rhino populations.

It is for this reason that proposals to legalise trade have emerged. The South African Government appears to support legal trade as a potential solution whereby rhino losses may be mitigated. In March 2013 Minister Molewa stated that she believes the legalisation of trade is the right direction to take to curb rhino poaching.⁵ As a result South Africa intends to make trade proposals at the next CITES conference, to be held in Cape Town in 2016. It will be South Africa's third attempt to do so since 1994.⁶ At the CITES Conference of the Parties held in 2013 (CoP16) South Africa did not propose the legalisation of trade in rhino horn. However, what emerged from this CoP were resolutions to 'develop and implement strategies to reduce the demand for rhino horn in countries of origin, transit and destination', and:

³ The Convention on International Trade in Endangered Species in Fauna and Flora, Mar. 3, 1973, 27 UST 1087; TIAS 8249; 993 UNTS 243 (hereinafter CITES); Black Rhinoceros (*Diceros bicornis*) has been on CITES appendix I since 1977 and is rated as critically endangered by IUCN. Emslie, R. 2012. *Diceros bicornis*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. Available at www.iucnredlist.org. Downloaded on 11 January 2014; White Rhinoceros (*Ceratotherium simum*) was downlisted to CITES appendix II in 1994 but only for trade in live animals to "approved and acceptable destinations" and for the (continued) export of hunting trophies and is rated as near threatened by IUCN. Emslie, R. 2012. *Ceratotherium simum*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2 available at www.iucnredlist.org downloaded on 11 January 2014.

⁴ National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): National moratorium on trade of individual rhinoceros horn within South Africa. GN 148 in GG 31899 of 13 February 2009.

⁵ J Rademeyer 'SA pushes for legal trade in rhino horn' *Mail & Guardian*, 22 March 2013.

⁶ CoP 9 Prop 17 Amendments to Appendices I and II of the Convention (1994); CoP 10 Prop 28 Consideration of Proposals for the Amendment of Appendices I and II (1997).

[T]o seek sufficient funding to convene a joint CITES ivory and rhinoceros enforcement task force for the purpose of exchanging intelligence on illegal trade in ivory and rhino horn, and developing strategies for combating the activities concerned.⁷

In addition, the Department of Environmental Affairs participated in a number of 'rhino related side events on the margins of the CITES CoP16'.⁸ These related to rhino conservation, rhino safety and security and rhino economics.

In the lead up to the 2016 CITES conference (CoP17) South Africa has commissioned a series of studies into the rhino horn trade, as dozens of questions fall to be considered, including, how it would be regulated; whether it will alleviate or exacerbate the crisis; and whether or not it is a viable option. In July 2013, the Department of Environmental Affairs (DEA) published the Rhino Issue Management Report (RIMR) which provides an overview of the conservation status of the rhino and tables the initiatives currently implemented for their protection. It also summarises different views on the various commerce and trade models available.⁹ In the RIMR, it is pointed out that:

Banning of the rhino horn trade by CITES and the concomitant moratorium on domestic trade by South Africa has had the unintended consequence of increasing poaching of live animals as there is no other horn available.¹⁰

The above statement invites the question of whether the legalisation of trade will have the opposite effect. This paper will endeavour to consider this question by weighing up the available options and the arguments presented for

⁷ 'CoP16 Doc 54.1 (Rev.1) Interpretation and Implementation of the Convention—Species Trade and Conservation: Rhinoceroses; MoU signed with China on combating rhino poaching' (2 April 2013) *Legalbrief Today*, The department of environmental affairs 'Minister Edna Molewa's speech at the Portfolio Committee on Water and Environmental Affairs Stakeholder Workshop on rhino poaching' available at https://www.environment.gov.za/speech/molewa_portfoliocommittee_stakeholderworkshop, accessed on 6 January 2014.

⁸ 'South Africa participates in CITES CoP16' available at https://www.environment.gov.za/content/southafrica_citescop16, accessed on 16 June 2013.

⁹ The Department of Environmental Affairs 'Rhino Issue Management Report 2013' at 1 available at https://www.environment.gov.za/sites/default/files/docs/rhinoissue_managementreport.pdf, accessed on 21 November 2013.

¹⁰ *Ibid* at 22.

and against the legalisation of trade in light of the on-going challenges encountered in combating the poaching crisis. The paper will also contemplate the likelihood of CITES accepting a proposal for trade, and what such a trade regime might look like. For the purposes of this proposed analysis, it is of vital import to provide the applicable context. This will be achieved in **chapter two** by setting out how the poaching crisis emerged in South Africa, which will in turn involve detailing the events and circumstances surrounding the unmanageable escalation in poaching, and exploring the manifold factors influencing the current crisis.

However, in order for the picture to be complete one also needs to consider the response to the aforementioned factors. In the South African context this involves a brief analysis of the applicable legal framework and its shortcomings. More specifically, an analysis of the National Moratorium on Domestic Trade in Rhino in South Africa of 2009, the National Environmental Management Biodiversity Act¹¹ (NEMBA) and Threatened or Protected Species Regulations¹² (TOPS Regulations). These instruments seek to control trade in, and protect species at, a domestic level, thereby providing support to the international trade regulations. This chapter will thus seek to consider the effect these instruments have had on trade, as well as detail South Africa's response to the poaching epidemic and the efficacy thereof.

Against this backdrop, **the third chapter** of this paper will briefly outline the current international regulatory framework with regards to trade in rhino horn. The primary focus is on CITES as the vehicle responsible for the international ban on the trade in rhino horn, and thus the vehicle empowered to lift said ban and provide the guidelines or mechanisms for the regulation of trade. This chapter will discuss the operation of CITES and its appendices.

¹¹Act 10 of 2004.

¹² National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Threatened or Protected Species Regulations, 2007 GNR 152 in GG 29657 of 23 February 2007.

It is important to note that the debate surrounding the merits of a legalised trade and how it should be structured is moot in the event that CITES fails to accept South Africa's trade proposal and hence international trade in rhino horn remains illegal. It thus falls to be considered what such a proposal should contain, and to outline the procedure to be followed in making such a proposal, that is, to amend the CITES appendices.

The **fourth chapter** aims to provide a picture of the controversy surrounding the proposed trade in rhino horn by highlighting the principal theories for and against the legalisation of trade in rhino horn. This chapter will also introduce case studies relating to the African Elephant and vicuña and, by looking at the degree to which they can be compared to the rhino and rhino products, will regard the implications of the legalisation of rhino trade. Further, this chapter will conclude with an analysis of the various schools of thought, in light of the context provided, and the realities of the current poaching crisis. This examination will ultimately form a suggestion as to the way forward, and whether legalised trade is the most viable option.

One of the aspects to be considered in determining whether trade in rhino horn is viable is how such a trade will be modelled and how it will be regulated. Therefore the **penultimate chapter** evaluates the Final Report on Decision-Making Mechanisms and Necessary Conditions for Future Trade in African Elephant Ivory ¹³(the Report), for the purposes of establishing whether a mechanism designed to regulate trade in ivory can be used as a model for trade in rhino horn. The Report is a document commissioned by the CITES Secretariat, constituting a "technically-focused study on a 'decision-making mechanism for a process of trade in ivory under the auspices of the Conference of the Parties'".¹⁴ This document does not aim to determine whether there should be legal trade in ivory, rather, it is intended to provide a template which can be

¹³ R B Martin, D H M Cumming, G C Craig, SC Gibson, D A Peake *Decision Making Mechanism and Necessary Conditions for Future Trade in African Elephant Ivory*, (SC-62 Doc. 46.4 Annex, CITES, Geneva, 2012).

¹⁴ *Ibid* at 1.

used by parties in the event of a future trade in ivory under CITES.¹⁵ The Report consists of principles for trade, the decision-making mechanism and its conditions, and the reasoning behind them.

In aid of providing a background to the formulation of the Report, the history of the international trade in African Elephant ivory, will be detailed in brief. This will act as a precursor to an analysis of the aforementioned Report through an exposition of its provisions, relevance, and possible application, in the context of trade in rhino horn. In order to balance perspectives one must also consider any criticism levelled against the proposed Decision-Making Mechanisms including, for example, allegations that the study did not provide options of decision-making mechanisms.¹⁶ These arguments are compelling in that they are very probable to emerge in the context of a proposed rhino horn trade.

In summary this dissertation will propose whether legalised trade is the next step in the measures taken to address the rhino poaching crisis, and will seek to provide recommendations as to the way forward. The final chapter will aim to articulate some of the parameters, concerns and conditions to be borne in mind in assessing the viability of a future trade in rhino horn, as derived from the discussions in the afore going chapters of this paper.

¹⁵ Ibid.

¹⁶ E Morgera 'CITES/SC-62: Tackling the Elephant Crisis' (2012) 45 4-5 *Environmental Policy and Law* 254 at 255.

CHAPTER 2 - THE POACHING CRISIS IN SOUTH AFRICA: THE RISE OF A CONTROVERSIAL PROPOSITION

1. History

The poaching crisis currently beleaguering Southern Africa, while astonishing in its development and intimidating in its scope, is not unprecedented. Historically the rhino has been subject to hunting for sport as part of game control, or for their horn which has been used for ornamental and medicinal purposes for centuries. By the late 1800s the southern white rhino had been hunted to near extinction so that a mere 20 animals remained in Hluhluweu Mfolozi Game Reserve in 1895.¹⁷ Black rhino populations were similarly decimated in southern Africa by the 1930s, leaving just 110 animals in game reserves, however the general population surviving in Africa remained relatively abundant.¹⁸ This initial decline in the African rhino population is largely attributed to hunting for the purposes of land clearance for agricultural and human settlement.¹⁹ While the black rhino population continued to wane, the southern white rhino demonstrated a remarkable recovery as a result of a protection programme initiated in South Africa.²⁰

However, the subsequent recovery was short lived as world rhino populations plummeted as a result of increased poaching. Emslie and Brooks report that black rhino numbers began to decline in the 1960s, and that between 1970 and 1995 they dropped from 65000 to 2 410 animals.²¹ They attributed the

¹⁷ R Emslie (2012) *Ceratotherium simum* In: IUCN Red List of Threatened Species. Version 2012.2 <www.iucnredlist.org>, accessed on 1 December 2013; Department of Environmental Affairs (note 9) at 9.

¹⁸ Department of Environmental Affairs (note 9) at 9; R Emslie & M Brooks *African Rhino Status Survey and Conservation Action Plan* (1999) IUCN/SSC African Rhino Specialist Group IUCN, Gland, Switzerland and Cambridge, UK. ix + 92, at 5.

¹⁹ WWF Factsheet 13th Meeting of the Conference of the Parties to CITES, Bangkok, 2-14 October 2004: Black Rhinoceros *Diceros bicornis* available at www.panda.org/downloads/ecop13blackrhinofactsheet.pdf, accessed on 25 January 2013.

²⁰ M H Knight 'African Rhino Specialist Group report 10th Meeting of the IUCN/SSC African Rhino Specialist Group' 2011 *Pachyderm*, 49: 6-15; Walker, C & Walker, A *The Rhino Keepers* 2012 Jacana Media, Auckland Park: South Africa.

²¹ R Emslie & M Brooks (note 18) at 5.

increased poaching pressure to demand escalations in Asia and the Middle East, particularly Yemen, during the 1970s and the 1980s.²²

Michael t'Sas Rolfes offers a theory for this sudden rise in demand. He suggests that the spike in the consumption of rhino horn coincided with the discovery of oil in Saudi Arabia in the early 1970s.²³ This discovery afforded Yemeni men a plethora of economic opportunities, and the resultant prosperity increased the demand for dagger handles made from rhino horn, a traditional emblem of status in Yemen.²⁴ In addition, growing demands by Japan, South Korea and Taiwan for traditional medicine derived from rhino horn only sought to intensify poaching.²⁵ As a result of growing demand for the horn and the rapidly depleting rhino population, an international trade ban was introduced under CITES in the 1970's. This ban served as the primary international instrument to regulate trade in endangered species.

It has been suggested by some commentators that the intensive international pressure and outcry against the crisis led to the eventual abatement of the illegal trade and thus poaching levels. Micheal t'Sas Rolfes claims that the trade ban was a failure initially in that it added to the perception of a supply shortage, causing prices to soar. In consequence, black market trade flourished, leading to the decimation of the rhino population.²⁶ t'Sas Rolfes maintains that the reason for the decrease in poaching levels relates to stockpiling in reaction to the trade ban which provided a steady supply for some time, in combination with the break out of civil war in Yemen, and the fact that very few unprotected rhino populations exist anymore²⁷. In any event, the result was decreased poaching levels and the subsequent stabilisation of populations,

²² Ibid at 5.

²³ M t'Sas Rolfes 'Elephants, Rhinos and the Economics of the Illegal Trade' 1997 *Pachyderm* at 26.

²⁴ Ibid at 26.

²⁵ K Ellis 'Tackling the demand for Rhino Horn' 2013 *The Horn* at 23, available at www.savetherhino.org, accessed on 27 November 2013.

²⁶ M t'Sas Rolfes (note 23) at 27.

²⁷ Ibid.

primarily due to the strategic efforts of South Africa which emerged as the most successful range state.²⁸

2. Emergence of the poaching crisis in South Africa

2.1. Events and circumstances surrounding the unmanageable escalation in poaching: Growing demand and the illegal trade.

Trade Records Analysis on Fauna and Flora in Commerce (TRAFFIC), an international wildlife trade monitoring network, reports that South Africa lost approximately 13 rhinos per year to poaching between 1990 and 2007, reflecting a period of stabilisation.²⁹ However, in 2008 this number suddenly rose to 72 and thereafter escalated so rapidly that 2012 reflects 668 rhino poaching incidents.³⁰ This trend continued unabated throughout 2013 with 1004 incidents reported by the DEA on 17 January 2014.³¹ Poaching is fuelled by international and domestic trade bans which in turn results in increased demand for rhino products through illegal market channels. Specifically, increases in demand for rhino products are attributable to Vietnam which recently emerged as a primary importer of rhino horn.³²

The potential explanations for the increase in demand for rhino horn are manifold. For example, some are of the opinion that rhino horn is now being marketed as a cure for cancer, which is totally unrelated to its traditional medical

²⁸ Ibid.

²⁹ TRAFFIC's engagement on African rhinoceros conservation and the global trade in rhinoceros horn available at <http://www.traffic.org/rhinos/>, accessed on 3 December 2013. TRAFFIC is responsible for undertaking numerous studies on the rhino horn trade spanning Asia, the Middle East and America, thereby gathering data and a necessary understanding of the illegal trade, see R Emslie & M Brooke (note 18) at 37.

³⁰ Ibid.

³¹ Department of Environmental Affairs 'Update on rhino poaching statistics (17 January 2014 update)' available at https://www.environment.gov.za/mediarelease/rhinopoaching_statistics_17jan2014, accessed on 2 February 2014.

³² T Milliken & J Shaw *The South Africa - Viet Nam Trade Nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates* (2012) TRAFFIC, Johannesburg, South Africa at 58-60.

use.³³ Others, such as Micheal t'Sas Rolfes, attribute it to 'the realignment of market supply and demand factors.'³⁴ The rapid economic growth in many Asian countries has led to a greater population in possession of a disposable income.³⁵ Vietnam is an embodiment of this new wealth, and features a younger generation intent on acquiring luxury products. On account of its skyrocketing prices, rhino horn is understood to convey a social status to its consumer and thus may be considered a product in the luxury trade.³⁶

As of 25 February 2013 rhino horn reached a market value of R536 119 per kilogram, almost double the price of gold and close to the street value of cocaine.³⁷ It is the combination of illicit trade, the high value product and 'price-inelastic' demand that has led organised crime syndicates to become involved. While already implicated in exploiting the weaknesses in the regulation of sport hunting, and undermining the trophy hunting industry, their role has become even more pronounced with the rise of poaching.³⁸ Rhino horn trade syndicates are considered by the National Wildlife Crime Reaction Unit to be operating on five levels, from the poachers to an international consumer, usually in Asia and particularly in Vietnam.³⁹ It is for this reason that poaching operations in South Africa and methods of illegal export have become increasingly sophisticated, operating with greater efficiency and coordination.⁴⁰ Furthermore due to the

³³T Milliken R H Emslie & B Talukdar (2009) *African and Asian Rhinoceroses – Status, Conservation and Trade: A report from the IUCN Species Survival Commission (IUCN/SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP14) and Decision 14.89.Doc CoP15 45.1. Annex*, CITES Secretariat, Geneva, Switzerland, pp.19 at 9, available at <http://www.cites.org/common/cop/15/doc/E15-45-01A.pdf>, accessed on 11 December 2013.

³⁴ M t'Sas Rolfes 'The Rhino Poaching Crisis: a Market Analysis' 2012 available at www.rhino-economics.com, accessed on 12 November 2013 at 9.

³⁵ T Milliken & J Shaw (note 32) at 136.

³⁶ Ibid at 136.

³⁷ K Sharife 'Is it time to legalise rhino horn trade?' available at <http://mondediplo.com/openpage/is-it-time-to-legalise-rhino-horn-trade>, accessed on 13 November 2013.

³⁸T Milliken and J Shaw (note 32) at 78-79.

³⁹ Ibid at 80.

⁴⁰ Ibid.

organisation introduced by the Asian crime syndicates, poachers now meet the heightened security around rhino populations with proportionate violence.⁴¹

This situation is further exacerbated in South Africa as a result of its proximity to Mozambique. The latter has emerged as an entrepôt and a transit country for the movement of rhino horn.⁴² Not only does Mozambique share a 365km unfenced border with South Africa's Kruger National Park due to the establishment of the Limpopo Transfrontier Park, but the wildlife legislation in Mozambique is also notably poor.⁴³ Rhino poaching and trading in its horn is not considered a criminal offence but a misdemeanour, and law enforcement is insufficient, meaning that Mozambican poachers and those willing to assist in exporting the horn, are readily recruited by international criminal syndicates.⁴⁴ As a result, many of the poachers operating in South Africa are of Mozambican nationality.⁴⁵ CITES has since called on Mozambique to enact and implement legislation with the appropriate penalties for wildlife crime, to prevent the illegal killing of rhinos and the trade in their horn and to implement the requirements arising out of CoP15 relating to the conservation of and trade in African and Asian rhinoceroses.⁴⁶

The general consensus is that poaching incidents began to rise again in South Africa from 2008.⁴⁷ This phenomenon followed closely on, and coincided with the steps taken by the South African Government to address the influx of 'hunters' intent on obtaining rhino horn for the purpose of supplying the illegal market. The introduction of the National Moratorium on rhino horn sales in

⁴¹ Ibid.

⁴² M 'tSas Rolfes (note 34) at 8-9; T Milliken, E Emslie & B Talukdar (note 33) at 5.

⁴³ Save the Rhino 'Mozambique's role in the poaching crisis' available at http://www.savetherhino.org/rhino_info/thorny_issues/mozambiques_role_in_the_poaching_crisis, accessed on 12 December 2013.

⁴⁴ M 'tSas Rolfes (note 34) at 8-9; T Milliken E Emslie & B Talukdar (note 33) at 5.

⁴⁵ T Milliken and J Shaw (note 32) at 85.

⁴⁶ CITES (2013) Rhinoceroses (Rhinocerotidae spp.) Resolution Conf. 16.84 – 16.92 (Rev. CoP16) available at http://www.cites.org/eng/dec/valid16/16_84-92.php, accessed on 20 November 2013; CITES (2010) Conservation of and trade in African and Asian rhinoceroses. Resolution Conf. 9.15 (Rev.CoP15) available at <http://www.cites.org/eng/res/09/09-14R15.php>, accessed on 20 November 2013.

⁴⁷ TRAFFIC (note 30).

February 2009, combined with stricter permitting requirements for the handling of rhinos and horn, and greater regulation of the trophy hunting industry as described below, have failed to quell rhino poaching in South Africa.⁴⁸

In 2006 South Africa experienced an increase in the number of Vietnamese nationals applying for trophy hunting permits with respect to white rhinos.⁴⁹ It gradually became obvious that the ‘trophies’, borne of what has been termed ‘pseudo-hunting’, were in fact being used to supply the illegal trade in rhino horn products.⁵⁰ South Africa responded by applying stricter measures in the hunting permit system and by correcting apparent and perceived legislative loopholes and ambiguities.⁵¹ For example, prior to the implementation of the TOPS Regulations a major loophole existed in the form of ‘standing permits’, which are defined under regulation 1 as permits that are valid for a longer specified period than an ordinary permit.⁵² The standing permit system utilised in some provinces prior to the implementation of the TOPS Regulations, allowed white rhino to be hunted on certain properties without permits.⁵³ This meant that rhino could be hunted without the knowledge of local conservation agencies, and thus the provincial authorities screening CITES export permit applications could authorise the export of illegal rhino horn as they would be ignorant as to the legality of the hunt.⁵⁴ Standing permits are now governed by regulation 5(2) which lists persons or bodies that may apply for a standing permit, such as the landowner of a registered game farm, who may apply for game farm hunting permits with respect to threatened or protected species on the farm if the registration requirements under Chapter 3 of the TOPS Regulations are complied with.⁵⁵

⁴⁸ M tSas Rolfes (note 34) at 8-9; T Milliken E Emslie & B Talukdar (note 3333) at 4.

⁴⁹ Ibid at 54.

⁵⁰ Ibid at 55-56.

⁵¹ Department of Environmental Affairs (note 9).

⁵² T Milliken & J Shaw (note 32) at 56.

⁵³ T Milliken & J Shaw (note 32) at 38.

⁵⁴ Ibid.

⁵⁵ Regulation 5(3) of the TOPS Regulations.

Another approach to narrowing the potential avenues of abuse saw the implementation of new standards in July 2009 which limited hunters to one white rhino per year each, and called for national approval prior to the issuing of provincial hunting licences.⁵⁶ It was found however, that syndicates were able to recruit individuals to pose as professional sport hunters so as to circumvent the limitation of one rhino per year.⁵⁷

'Pseudo-hunting' has since been further restricted through the requirements that a law enforcement official be present at every hunt, that hunters who apply for permits prove that they are *bona fide* sports hunters, and the decision to ban Vietnamese nationals from obtaining hunting permits.⁵⁸ Milliken et al suggest that these steps, while successful, have simply contributed to the shift towards illegal means of obtaining horn, such as poaching.⁵⁹ The Rhino Issue Management Report adds that syndicates have simply adjusted to the new legal regime around hunting in that they spread the applications for hunting permits across the nationality profile.⁶⁰ In other words, Vietnamese nationals would, for example, hire sport hunters from other countries, such as Poland or the Czech Republic, to circumvent the restrictions placed on the former.⁶¹

2.2. South Africa's response

2.2.1. Legal and Regulatory Measures

a) *Legal framework and measures to control hunting*

It is instructive, in assessing the position of the rhino in South Africa, to consider the legislation governing the management of rhino populations, the

⁵⁶ National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Marketing of rhinoceros horn & hunting of white rhinoceros for trophy hunting purposes GN 756 in GG 32426 on 20 July 2009; T Milliken E Emslie & B Talukdar (note 33) at 11.

⁵⁷ T Milliken, R H Emslie and B Talukdar (note 1) at 9.

⁵⁸ Ibid at 4; Paragraphs 3 (3) and 3(8) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): Marking of rhinoceros horn and hunting of rhinoceros for trophy hunting purposes GN 756 in GG 32426 of 20 July 2009.

⁵⁹ Ibid at 4.

⁶⁰ Department of Environmental Affairs (note 18); T Milliken E Emslie & B Talukdar (note 1) at 5.

⁶¹ T Milliken E Emslie & B Talukdar (note 1) at 5.

regulation of activities affecting the species and the protection afforded to rhinos. Since 2004 the key piece of legislation providing for the management and protection of South Africa's biodiversity has been the NEMBA. NEMBA is designed to operate within the framework established by the National Environmental Management Act⁶² (NEMA).⁶³ The objectives of NEMBA include the management and conservation of the country's biological diversity and its components, and it aims to give effect to international agreements ratified by South Africa.⁶⁴

NEMBA provides for the promulgation of norms and standards necessary for the achievement of these objectives, including those related to the 'restriction of activities which impact on biodiversity and its components'.⁶⁵ Norms and standards of primary application to the management of rhinos and their products include those for the 'marking of rhinoceros and rhinoceros horn, and for the hunting of rhinoceros for trophy hunting purposes' (the Norms and Standards).⁶⁶ These Norms and Standards have replaced those governing the marking of rhino horn and trophy hunting of white rhino first promulgated in July 2009⁶⁷ so as to address loopholes identified in the latter.⁶⁸ They act to provide specific guidance by, for example, specifying that a hunting client may only hunt one white rhinoceros trophy per year.⁶⁹ The aforementioned norms and standards are intended to be read in conjunction with the TOPS Regulations governed by Chapter 4 of NEMBA. This chapter provides for the listing of species that are

⁶² Act 107 of 1998.

⁶³ M Van der Linde & L Feris (eds) *Compendium of Environmental Legislation* (2010) Pretoria University Law Press, Pretoria, South Africa at 119.

⁶⁴ s 2(a),(b) of NEMBA.

⁶⁵ s 9(1)(a)(ii) of NEMBA.

⁶⁶ National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): Norms and Standards for the marking of rhinoceros and rhinoceros horn, and for the hunting of rhinoceros for trophy hunting purposes GN 304 in GG 35248 of 10 April 2012.

⁶⁷ National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): Marking of rhinoceros horn and hunting of rhinoceros for trophy hunting purposes GN 756 in GG 32426 of 20 July 2009.

⁶⁸ T Milliken & J Shaw (note 32) at 38.

⁶⁹ Regulation 3(6) of the Norms and Standards for the marking of rhinoceros and rhinoceros horn, and for the hunting of rhinoceros for trophy hunting purposes

threatened or in need of national protection.⁷⁰ Section 57 further provides that where a restricted activity involves a listed species, the person carrying out the activity must obtain a permit in terms of Chapter 7 of NEMBA which governs permitting. A restricted activity is defined under NEMBA to include the hunting, killing, chopping off of a specimen of a listed species, trading in a specimen of a listed species and exporting such a specimen from the Republic.⁷¹ In addition, the Minister of Environmental Affairs must monitor compliance with any international agreement regulating trade in specimens of endangered species which South Africa has ratified.⁷²

The TOPS Regulations are promulgated in terms of section 97 of NEMBA. The purpose includes further regulation of the permit system established in terms of Chapter 7 of NEMBA, to the extent that the system applies to restricted activities involving listed species, as well as the regulation of hunting and the prohibition of certain restricted activities. Notably, the amendment to these regulations make special provision for matters pertaining to rhinos. Regulation 24 lists prohibited activities involving *Ceratotherium simum* (White rhinoceros) and *Diceros bicornis* (Black rhinoceros), which provide added control over the limited trade allowed with respect to rhinos in the form of sub-regulations governing hunting and dealing in live specimens.⁷³ The regulations also provide specifically for the marking of rhino horn:

70. (1) Any person who is in possession of elephant ivory or rhinoceros horn must within three months of commencement of these regulations apply in writing to the issuing authority in the relevant province to have such elephant ivory or rhinoceros horn -

(a) permitted;

⁷⁰ s 56 of NEMBA.

⁷¹ s 1 of NEMBA.

⁷² s 59(a)(ii) of NEMBA.

⁷³ Prohibited activities include: the hunting of certain rhinos, the use of gin traps in hunting, and hunting rhinos in particular areas, or under certain conditions; the captive breeding of rhino without written undertaking that none of the animals will be bred, sold, supplied or exported for prohibited hunting activities; and the sale or purchase of live specimens without the requisite conditions being met.

(b) marked in accordance with subregulation (3); and

(c) registered on the national database for elephant ivory and rhinoceros horn.

...

(3) The issuing authority, if satisfied that the possession of the elephant ivory or rhinoceros horn is lawful, must, at the expense of the person applying for marking -

(a) mark the elephant ivory by means of punch die, or if not practicable, with indelible ink, using the following formula:

(i) The country-of-origin two letter ISO code and the last two digits of the particular year, followed by a forward slash;

(ii) the serial number for the particular year, followed by a forward slash; and the weight of the ivory in kilograms; or

(iii) mark the rhinoceros horn by means of a micro-chip;'.⁷⁴

b) Marking of rhino horn

The Norms and Standards provide further guidance as to the marking of rhino horn by specifying the necessary contents of an application for possession of rhino horn. The provisions require that the horns of rhinos sold or transported, or horns obtained as a result of natural mortality or in any other natural manner, be micro-chipped.⁷⁴ Paragraph 2 (4) states that an application for the possession of rhino horn must include information on the circumference, inner length and outer length of each individual detached horn, the weight of the horn, and a photo of the horn. The issuing authority is then responsible for conducting an inspection of the horn and verifying the information supplied by the applicant.⁷⁵ The official is then expected to mark the horn with indelible ink or punch die as per a particular formula.⁷⁶ This information is then to be kept in a

⁷⁴ Paragraph 2(3); Application for the horn to be micro-chipped must take place within 5 days of acquiring said horn.

⁷⁵ Paragraph 2 (5) of the Norms and Standards..

⁷⁶ Paragraph 2 (6) of the Norms and Standards.

provincial TRAFFIC database, and consolidated by the DEA in the national TRAFFIC database.⁷⁷ *DNA sampling*

DNA sampling is also governed by the Norms and Standards, which require that: when a live rhino is darted for any management purpose, samples must be taken on the animal's horn and blood using specialised DNA kits; and whenever horn is micro-chipped, horn samples must be taken.⁷⁸ The samples may only be collected by the persons listed under paragraph 4 (3) of the Norms and Standards, who include a registered veterinarian responsible for darting live rhino and adequately trained officials from the issuing authority. The aim of collecting samples is to send them to send them for analysis for DNA profiling.⁷⁹ The role played by DNA profiling is to provide is to assist law enforcement officials in detecting, investigating and prosecuting offenders involved in rhinoceros poaching and trade in their horn.⁸⁰ To support and enhance this initiative, the DEA, and the University of Pretoria's Veterinary Genetic Laboratory, in collaboration with the International Consortium on Combating Wildlife Crime (ICWC), held the first international DNA sampling workshop.

c) CITES Regulations

In addition to the TOPS Regulations and the Norms and Standards, the DEA has also published CITES Regulations⁸¹ under NEMBA. These regulations define the responsibilities of the Management Authority and Scientific Authority, the conditions of trade, specifications relating to the registration and marking of specimens of listed species, as well as offences and penalties to

⁷⁷ Paragraph 2(7) of the Norms and Standards.

⁷⁸ Paragraph 4 (1),(2) of the Norms and Standards.

⁷⁹ Paragraph 4 (4) of Norms and Standards.

⁸⁰ The Department of Environmental Affairs 'Forensics to support the fight against Wildlife Crime' (6 November 2013) available at https://www.environment.gov.za/mediarelease/forensicssupport_wildlifecrime, accessed on 5 February 2014.

⁸¹ National Environmental Management Biodiversity Act, Act 10 of 2004: Convention on International Trade in Species (CITES) Regulations GNR 173 in GG 33002 of 5 March 2010.

guide the domestic implementation of CITES. The international CITES trade regime will be explored in more detail in Chapter 3.

d) Legal and practical measures to improve management of rhinos

Finally, NEMBA makes provision for the development of Biodiversity Management Plans (BMPs) with respect to, amongst others, a listed threatened or protected species.⁸² The content of these plans is prescribed under section 45 of NEMBA, which requires that the BMP be aimed at ensuring the long-term survival of the species to which it relates. The DEA recently promulgated the Biodiversity Management Plan for the Black Rhinoceros,⁸³ which although not aimed at managing poaching activities, seeks to ensure the survival of the black rhino.⁸⁴

Poaching is also being addressed by way of different processes such as the National Rhino Management Strategy. The National Strategy for the Safety and Security of Rhinoceros Populations of South Africa (NSSSRPSA) outlines the DEA's rhino response strategy.⁸⁵ The purpose behind the strategy is to provide guiding principles necessary for decision-making and planning related to curbing rhino poaching and to ensure the successful prosecution of those implicated in the illegal trade at a national, regional and international level.⁸⁶ The NSSSRPSA is informed by NEMBA, the National Environmental Management Protected Areas Act⁸⁷ (NEMPAA), national policy documents, relevant

⁸² s 43 of NEMBA.

⁸³ National Environmental Management Biodiversity Act, 2004 (Act No 10. 2004): Biodiversity Management Plan for the Black Rhinoceros (*Diceros Bicornis*) in South Africa 2011- 2020 GN 49 in GG 36096 of 29 January 2013.

⁸⁴ 'The Minister of Water and Environmental Affairs Gazettes the Biodiversity Management Plan for Black Rhino for Implementation 2013 available at https://www.environment.gov.za/content/minister_gazettes_biodiversitymanagementplan_blackrhino, accessed on 20 September 2013.

⁸⁵ Department of Environmental Affairs (note 9).

⁸⁶ Department of Environmental Affairs *National Strategy for the Safety and Security of Rhinoceros Populations in South Africa* (2010) available at <http://www.rhinosourcecenter.com/index.php?s=1&act=pdfviewer&id=1301008151&folder=130>, accessed on 3 December 2013.

⁸⁷ Act 57 of 2003.

strategies and conservation plans and international agreements ratified by South Africa.⁸⁸

The RIMR was commissioned for the purposes of augmenting the DEAs NSSSRPSA document.⁸⁹ The RIMR is an amalgamation of knowledge and perspectives around the sustainable conservation of rhinos from several experts, including ecologists, rhino specialists, civil society, hunters and economists.⁹⁰ The RIMR indicates that there is support for the legalisation of a commercial trade in rhino horn as a primary component of South Africa's response strategy, and that this has contributed towards Cabinet's decision to submit a rhino trade proposal for consideration at the 17th CITES Conference of the Parties in 2016.⁹¹

2.2.2. Criminal Measures: Prosecutions and Penalties

As a result of its status as a priority crime, rhino poaching features prominently in the National Environmental Compliance and Enforcement Report 2012/13 (NECER).⁹² Firstly NECER claims that illegal hunting continues to be the most prevalent environmental crime within the so-called "green" sub-sector.⁹³ The Report reflects that SANPARKS reported 454 incidents of illegal hunting of rhino in a national park, its most prevalent crime. Similarly, the Mpumalanga Tourism and Parks Agency points to illegal hunting of rhino as its most prevalent crime, with 27 reported incidents.⁹⁴

Chapter 9 of the NECER, which relates to biodiversity enforcement and compliance, is largely focused around criminal enforcement related to rhinos.⁹⁵

⁸⁸ Department of Environmental Affairs (note 86).

⁸⁹ Department of Environmental Affairs (note 9) at vii.

⁹⁰ Department of Environmental Affairs (note 9).

⁹¹ Ibid.

⁹² Department of Environmental Affairs *National Environmental Compliance and Enforcement Report 2012/13* (2013) Chief Directorate of Communications, Department of Environmental Affairs, Pretoria, South Africa.

⁹³ Ibid at 10; NECER 2012/13 utilises 'green' to denote compliance and enforcement activities taking place in the biodiversity and protected areas sub-sector.

⁹⁴ Ibid at 11.

⁹⁵ Ibid at 56.

It further acknowledges that proper investigation, prosecution and conviction of those arrested in connection with poaching, and the imposition of an appropriate penalty, are crucial in order for these measures to provide an effective deterrent to poaching. NECER reports a total of 333 rhinos poached in 2010, 448 rhinos in 2011, and 668 rhinos in 2012, across South Africa's provinces and national parks.⁹⁶ In contrast the Report provides that a total of 165 arrests were made in connection with rhino poaching in 2012, with 232 arrests in 2011, and 267 in 2012. It is evident that while the poaching statistics have more than doubled over two years, the number of arrests has not increased proportionately.⁹⁷ In addition it is notable that the majority of the losses to the rhino population were sustained in the Kruger National Park.⁹⁸

However, of these arrests, NECER reflects only 95 accused involved in 50 finalised cases related to rhino poaching prosecutions in the period April 2012 to April 2013.⁹⁹ These cases demonstrate a positive number of convictions, which constitute 72.6% of the accused involved and of these, 36 accused were convicted and sentenced to direct imprisonment without the option of a fine.¹⁰⁰ On the other hand 24.2% of accused escaped prosecution due to the case being withdrawn, and another 21% were convicted and sentenced to a fine.¹⁰¹ With respect to those convicted, the majority of the charges related to trespassing, the illegal possession of firearms of ammunition and illegal hunting.¹⁰² Fewer accused were actually successfully charged with the possession of horn, and a very small contingent was convicted for dealing in rhino horn.¹⁰³ These statistics illustrate one of the key concerns in the enforcement approach to addressing poaching, that is, that it primarily targets the poachers and not the middle-man. The implication being that trade is not cut

⁹⁶ Ibid.

⁹⁷ Ibid at 57.

⁹⁸ Ibid at 56.

⁹⁹ Ibid at.57; Finalised cases include cases where there has been conviction and sentencing or acquittal, and those which have been withdrawn or struck off the roll.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid at 58.

¹⁰³ Ibid.

off at the point of supply because poachers can readily be replaced by said middle-man.

Furthermore, NECER details a list of criminal cases with respect to rhino poaching that have seen ‘significant sentences’ handed down, largely by regional courts, on the basis of both common law and legislative offences.¹⁰⁴ These cases are of particular interest because they demonstrate the punitive approach of the courts to rhino poaching crime, evidenced by the imposition of heavy penalties. The results of the cases also suggest the willingness of the state to prosecute these offences seriously. For example, conviction on the basis of illegal hunting and the possession of firearms and ammunition sees the imposition of a 5 year prison sentence (even where no rhino was yet killed).¹⁰⁵ Another case involved two Mozambican nationals who were found guilty of illegally hunting 2 rhinos, trespassing in the Kruger National Park, and unlawful possession of firearms and ammunition.¹⁰⁶ The Nelspruit Regional Court sentenced both accused to 29 years imprisonment.¹⁰⁷

The most striking case is that of *S v Chumlong Lemtongthai and five others*¹⁰⁸. Chumlong Lemtongthai is a Thai national sentenced to 40 years direct imprisonment upon pleading guilty to 52 counts of contravention of South African legislation.¹⁰⁹ NECER reports as follows:

‘[Chumlong Lemtongthai] was alleged to have been trading in and exporting rhino horns from South Africa, which were then sold to the underground traditional medicine market in Asia. He was using prostitutes to pose as hunters in order to smuggle the horns out of the country, and was believed to be one of the kingpins of an international rhino horn smuggling syndicate.’¹¹⁰

¹⁰⁴ Ibid.

¹⁰⁵ Department of Environmental Affairs (note 92) at 58-9; *S v Renbulwane Patricia Mukwevi Mthobe, Tshamano Secret Kutuma, Abraham Mathlodi Stocks Kgalushi, Lewis Mashudu Musekwa*.

¹⁰⁶ Department of Environmental Affairs (note 92) at 58; *S v Ali Nkuna and Gerson Khoza* (Mozambican citizens).

¹⁰⁷ Ibid.

¹⁰⁸ Ibid; *S v Chumlong Lemtongthai (Thai citizen), Marnus Steyl, Tool Striton (Thai citizen), Harry Claassens (s204 witness) and 2 farmworkers*.

¹⁰⁹ Department of Environmental Affairs (note 92) at 32.

¹¹⁰ Ibid at 32.

The accused was charged with 26 counts of contravening section 80 (1)(i) of the Customs and Excise Act.¹¹¹ The latter provides that where someone makes improper use of a licence, permit or other document issued in respect of goods to which the Act relates, that person shall be guilty of an offence.¹¹² The act prescribes the penalty of a fine of no more than R20 000 or imprisonment for no more than five years, or both, for the contravention of the aforementioned provision.¹¹³ A further charges were brought in terms of section 57(1) of NEMBA, which prohibits the carrying out of a restricted activity involving a specimen of a listed threatened or protected species, on the basis that Chumlong 'unlawfully and intentionally traded rhino horn, a listed threatened or protected species, without the necessary TOPS permits to either trade in such horns or hunt and/or kill or export the rhino horns.'¹¹⁴ NEMBA in turn prescribes a penalty of 10 years imprisonment, and/or a fine of R 10 million.¹¹⁵

The decision of the court a quo was successfully taken on appeal on the basis that the Magistrate had misdirected himself in imposing a sentence of 40 years as the Customs and Excise act allows 5 years imprisonment for the relevant charges where the Magistrate had imposed 10 years.¹¹⁶ In deciding what an appropriate, just and fair sentence would be in the appeal court, Tsoka J, acknowledged the public outcry for the imposition of harsher sentences for rhino crimes in the wake of the increase in poaching since 2010, and asserted that public opinion should be considered in determining what constitutes an appropriate sentence.¹¹⁷ The judge insists that 'deterrence cries out in this matter' and that sentencing in this case should serve as a deterrent to all perpetrators of rhino crimes and act so as to dissuade potential poachers.¹¹⁸ In

¹¹¹ Act 91 of 1964.

¹¹² s 80 (1)(i) of the Customs and Excise Act.

¹¹³ Ibid.

¹¹⁴ *Chumlong v S* (A82/2013) [2013] ZAGPTH 294 (30 August 2013) at para 2.

¹¹⁵ s102(1) of NEMBA.

¹¹⁶ Supra note 114 at para 13.

¹¹⁷ Supra note 114 at 18; 31.

¹¹⁸ Ibid at 32.

light of these considerations, and the personal circumstances of the appellant, the court ultimately imposed a sentence of 30 years direct imprisonment.¹¹⁹

The judgement of *Chumlong v S* demonstrates the sensitivity of the court to public concern around the rhino poaching crisis and the demand for greater enforcement and more stringent penalties as a means of counteracting this crisis. The case also exemplifies the theory behind actively pursuing criminal prosecution and imposing heavy sentences, which is to deter other potential criminals from undertaking similar illegal activities through increasing the risk involved. However, while the numbers of rhino poached are rising rapidly, this trend is not adequately reflected in the number of arrests for rhino-related offences. What is more, one should bear in mind that of 232 arrests in 2011, and 267 arrests in 2012, only 95 accused were involved in finalised cases, and only 69 thereof were convicted. There disparity perhaps evidences the difficulty in connecting suspects to particular wildlife crimes. Moreover, despite the measures being taken, and the attitude of the courts, NECER declares that ‘the spectre of rhino poaching continues unabated in the 2012/13 financial year’.

2.2.3. Other practical measures

a) Anti-poaching activities and rhino-security

In addition to the steps taken to address the legislative loopholes that became apparent due to the abuse of trophy hunting, as mentioned above, South Africa has taken several practical steps towards curbing poaching within its borders. Notably; the South African government has increased state funding available for anti-poaching activities and activities related to rhino-security.¹²⁰ Other steps include the establishment of the National Biodiversity Investigator’s Forum in March of 2009, and the launch of the National Wildlife Crime Reaction

¹¹⁹ Ibid 33-4.

¹²⁰ S Ferreira & B Okita-Ouma ‘A proposed framework for short-, medium- and long-term responses by range states to curb poaching for African rhino horns’ 2012 *Pachyderm* No. 51 January—June 52 at 53.

Unit (NWRCU) in early/late February 2010.¹²¹ The latter was considered beneficial as it would encourage the exchange of information and cooperation between government bodies operating at provincial and national levels.¹²²

Due to the nature of the poaching threat in the Kruger National Park in particular, the South African Police Services (SAPS), the South African National Defence Force (SANDF), and South African National Parks (SANParks) have coordinated their responses in that area,¹²³ while the South African Police Service (SAPS) has also appointed a team of the SAPS Directorate of Priority Crime Investigation (SAPS DPCI) centred around rhino poaching activities at a national level.¹²⁴ Further the National Prosecuting Authority (NPA) has designated particular prosecutors for the purpose of dealing with organised environmental crime at a national and provincial level.¹²⁵

b) Dehorning

Yet another practical measure considered for the purpose of deterring poaching is the dehorning of rhino. In 2011 the DEA commissioned a study on the utility of dehorning as a tool for undermining poaching efforts.¹²⁶ This study considered the current insights into the effectiveness of dehorning, and raises a number of concerns which remain relevant to the present situation.

One of the said concerns was the reluctance of the private sector to release information about its rhino populations, either due to the potential risk posed to security, or because the horn was removed illegally.¹²⁷ The alleged reasons for illegal dehorning are that either the horn was removed for sale on

¹²¹ T Milliken & J Shaw (note 32) at 88.

¹²² Ibid.

¹²³ S Ferreira & B Okita-Ouma (note 120) at 53.

¹²⁴ T Milliken & J Shaw (note 32) at 88.

¹²⁵ S Ferreira & B Okita-Ouma (note 120) at 53.

¹²⁶ PA Lindsey and A Taylor 'A study of the dehorning of African rhinoceroses as a tool to reduce the risk of poaching' 2011. Report prepared by the Endangered Wildlife Trust (EWT) for the South African Department of Environmental Affairs (DEA), available at https://www.environment.gov.za/sites/default/files/docs/studyon_dehorning_african_rhinoceros.pdf, accessed on 5 February 2014.

¹²⁷ Ibid at 45.

the black market, or because the landholder does not want to inform nature conservation authorities.¹²⁸ As the dehorning of rhino involves the cutting or chopping off of parts of a threatened or protected species, it constitutes a restricted activity,¹²⁹ and in terms of s 57 (1) of NEMBA, is thus subject to permitting as per Chapter 7 of this Act and the TOPS Regulations. As discussed above, the Norms and Standards set out the requirements for an application for possession of a rhino horn, and provide that all 'individual detached rhino horns in private or state possession must be micro-chipped in accordance with Regulation 70 of the TOPS Regulations.'¹³⁰ The concomitant risks include leakage as to the whereabouts of horns, and costly delays in the permitting system.¹³¹ Another concern is that there have been reports of dehorned rhino being poached for their stumps.¹³² Due to the price of horn, and the fact that the base could weigh up to a kilogram, the stump may still carry a value to poachers.¹³³ In addition, poachers have been known to kill a dehorned rhino to ensure that they do not track the animal again.¹³⁴

Dehorning is both logistically challenging and financially burdensome, and would have to be repeated every two to three years in light of the growth rate of the horns.¹³⁵ In addition the behavioural and social impacts of dehorning are uncertain, for example, some studies indicate that calves are less likely to survive in areas populated with hyenas and lions where the mothers have been dehorned.¹³⁶ These considerations, in combination with the desirability of the horn stump, suggest that dehorning should only be utilised in time of sever poaching stress, and must be used in concert with security measures.¹³⁷

¹²⁸ Ibid.

¹²⁹ section 1 of NEMBA.

¹³⁰ Paragraph 1.1.of the Norms and Standards.

¹³¹ PA Lindsey and A Taylor (note 126) at 45.

¹³² Ibid.

¹³³ Department of Environmental Affairs (note 9) at 18.

¹³⁴ Ibid,

¹³⁵ Ibid.

¹³⁶ C Cunningham and J Berger 1994 The de-horning dilemma *Wildlife Conservation* 97 (1),15.

¹³⁷ PA Lindsey and A Taylor (126) at 46,50.

c) *Poisoning of horn*

Treating rhino horn with a poison so as to make it less desirable to poachers and consumers has been raised by stakeholders.¹³⁸ A combination of 3 substances is typically injected: The first is a dye which stains the interior of the horn which makes it less appropriate for decorative purpose; the second is a substance which makes the horn detectable under x-ray and thus harder to transport; and the third is a poison.¹³⁹ The poison is harmful but non-lethal to humans and symptoms include vomiting, diarrhoea, nerve disorders and other dose-related health problems.¹⁴⁰ The rhinos' health is not affected because there are no veins in the animals' horns.¹⁴¹

The legal ramifications of poisoning have been brought into question as consumers may have recourse if poisoned in this manner even if they obtained the horn illegally.¹⁴² That said, any harm suffered as a result of poisoning that occurred outside of South African borders could not be brought before South African courts.¹⁴³ Thus, prosecution of South Africans who have so poisoned rhino horns would be subject to extradition requirements.¹⁴⁴

The effectiveness of this measure has not been confirmed. The pilot program started in the latter half of 2013 at the Ezemvelo Wildlife Park and if successful, will spread to other parks.¹⁴⁵

d) *The South African dilemma: poaching persists*

It is important to note that despite the legal framework in place, the tightening of the regulation of the hunting industry, and the steps taken to

¹³⁸ Department of Environmental Affairs (note 9) at 18.

¹³⁹ Department of Environmental Affairs (note 9) at 18.

¹⁴⁰ T Carnie 'Rhino horn poison extremely toxic' available at <http://www.iol.co.za/scitech/science/environment/rhino-horn-poison-extremely-toxic-1.1575937#.UwCxj2KSzww> accessed on 8 January 2014.

¹⁴¹ Ibid.

¹⁴² H Dagut 'Poisoning rhino horn - ethically defensible, but legally questionable?' available at <http://www.bizcommunity.com/Article/196/622/102600.html> accessed on 8 January 2014.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid

improve the management and protection of the rhino, the poaching continues to escalate with numbers nearly doubling annually.¹⁴⁶ It is clear from the discussion above that South Africa is attempting multiple approaches to addressing the increase in poaching, including more stringent enforcement and the imposition of heavy penalties in an attempt to deter transgressions. However the effect of these measure, whether legal, regulatory, criminal or practical, have not proven to offer a large enough degree of resistance against poaching to have any significant impact, even when used in combination. It is evident from the declaration of rhino poaching as a priority crime that it is considered a crisis, and that it is at the forefront of national concern.¹⁴⁷

¹⁴⁶ Biggs, Franck Courchamp, R Martin and H P Possingham 'Legal Trade of Africa's Rhino Horns' 1 March 2013 *Science* Vol 339 No 6123 pp1038-1039 at 1038 available at <http://www.sciencemag.org/content/339/6123/1038>.

¹⁴⁷ The Department of Environmental Affairs' Rhino poaching interventions and the position of South Africa to the 16th Conference of Parties of the Convention in International Trade in Endangered Species of Fauna And Flora (Cites)' available at https://www.environment.gov.za/content/rhinopoaching_interventionsandpositionofsa_16copofthecites accessed on 17 June 2013.

CHAPTER 3 - THE INTERNATIONAL LEGAL FRAMEWORK

1. Introduction

There are numerous international organisations, networks and agreements that monitor, control and study the wildlife trade, both illicit and legal. It is the application of these international instruments that influence domestic legislative and policy development, and impose obligations at a national level with regards to addressing the illegal rhino horn trade. The focus of this chapter will naturally fall on CITES, as the instrument in terms of which the trade ban was adopted.

2. CITES and the trade ban

2.1. Background

CITES is the primary international instrument regulating international trade in certain listed species of wild animal so as to ensure that said trade does not threaten their survival.¹⁴⁸ This agreement was entered into force in 1975, initiated by the General Assembly of the World Conservation Union (IUCN), and is legally binding on those who have ratified it, including South Africa.¹⁴⁹ CITES specifies which species may be traded and to what degree, and its members are expected to adhere to the restrictions, prohibitions and regulatory requirements imposed on trade by the agreement, its appendices, as well as

¹⁴⁸ Department of Environmental Affairs (note 9); PW Birnie and AE Boyle *International Law and the Environment* Second Edition 2002 Oxford University Press, Oxford, UK at 625; P Sands et al *Principles of International Environmental Law* (2012) Cambridge University Press, UK at 472. There are several other bodies and regional instruments relevant to the efforts to conserve rhino, and monitor and control trade in rhino products. These include the following: African Rhino Specialist Group (AfRSG) of the World Conservation Union Species Specialist Commission (IUCN/SSC) which constitutes the international framework for the conservation of rhino; Trade Records Analysis on Fauna and Flora in Commerce (TRAFFIC) which is an organisation which has developed in to a wildlife trade monitoring network and is responsible for undertaking numerous studies on the rhino horn trade spanning Asia, the Middle East and America, thereby gathering data and a necessary understanding of the illegal trade (See R Emslie & M Brooke (note 18) at 37); at regional level here are several African conservation initiatives including the Rhino Management Group (RMG), the Southern African Rhino and Elephant Security Group (RESG), the South African Development Community (SADC) rhino programme and the Lusaka Agreement.

¹⁴⁹ Ibid; T Milliken & J Shaw (note 32) at 44; CITES 'What is CITES?', available at <http://www.cites.org/eng/disc/what.php>, accessed on 17 January 2014; U Beyerlin and T Marauhn *International Environmental Law* 2011 Hart Publishing Ltd, Oxford, UK at 184; S Lyster *International Wildlife Law* (1985) Grotius Publications, Cambridge, UK at 239.

resolutions adopted at any Conference of the Parties (CoP). Therefore CITES is responsible for the present international trade ban with respect to rhinos and rhino products, and any proposal to legalise trade would require approval thereunder.¹⁵⁰

CITES provides framework for which is then translated into domestic legislation so as to ensure implementation at a national level.¹⁵¹ This is evident in the structure and operation of NEMBA and the TOPS Regulations.

2.2. The operation of CITES

CITES operates so as to regulate international trade in the species listed in the Appendices to CITES through a permitting system that governs import and export.¹⁵² Thus CITES requires government-authorized permits for any trade involving species or the products of species that are endangered or threatened.¹⁵³ The purpose of permitting is to provide a system for the control and monitoring of trade in wildlife across the borders of member states.¹⁵⁴ The implication is that the successful application of CITES relies on the efficacy of the permit system, competent domestic legislation and law enforcement.¹⁵⁵

Carey points out that it is evident from the CITES preamble that the purpose of this instrument is to 'strike a balance between species preservation and the competing economic and recreational demands placed upon wildlife.'¹⁵⁶ The Convention thereby gives effect to both the conservationist and preservationist ideologies.¹⁵⁷ This balance is reflected throughout the

¹⁵⁰ Trade ban is currently subject to white rhino which are partially listed under Appendix II, allowing for restricted trade in live rhino and hunting trophies.

¹⁵¹ Department of Environmental Affairs (note 9).

¹⁵² Ibid; J Glazewski *Environmental Law in South Africa Second Edition* (2005) Lexis Nexis, Durban, South Africa at 50.

¹⁵³ CITES (note 3) at article II (4).

¹⁵⁴ S Patal 'Convention on International Trade in Endangered Species: Enforcement and the last unicorn' 1995-6 16 *Hous. J. Int'l L.* 157 at 164.

¹⁵⁵ Ibid; Ibid at 163.

¹⁵⁶ J E Carey 'Improving the efficacy of CITES by providing the proper incentives to protect endangered species' 1999 77 *Wash. U. L. Q.* 1291 at 1295.

¹⁵⁷ Ibid at 1295-6; The preservationist approach advocates for the protection of species for their inherent, that is ecological and aesthetic, value. The conservationist approach acknowledges

Convention as it provides for the protection of species, and thus the restriction of trade, proportional to the risk posed to the sustainability of the species.¹⁵⁸ This is achieved by listing species in a hierarchy of appendices, classified according to their vulnerability to extinction.¹⁵⁹

Species are divided amongst the first three appendices. Appendix I lists species that are ‘threatened with extinction which are or may be affected by trade’.¹⁶⁰ CITES requires that trade in these species be severely restricted.¹⁶¹ Article III of CITES essentially prohibits commercial trade in Appendix I species and their products, and prescribes a strict permitting regime where both the importing and exporting country require permits for specific transactions.¹⁶² This Appendix thus advocates the preservationist approach in that it propounds the idea that the eradication of trade will eliminate it as one of the key threats to the species survival.¹⁶³

Appendix II lists threatened species for which the strict regulation of trade is considered necessary so as to guard against utilisation that threatens their sustainability.¹⁶⁴ This Appendix seeks to advance the conservationist theory in that it allows for a sustainable level of commercial trade in species which have the potential to face the threat of extinction.¹⁶⁵ CITES requires that export permits accompany trade in Appendix II listed species, and that the export permits be monitored and managed by the state’s Scientific Authority and Management Authority, respectively.¹⁶⁶

the role of individual nations cooperating with the international community, and advocates for sustainable use trade as the most effect means of species protection.

¹⁵⁸ S Patal (Note 154) at 164.

¹⁵⁹ Ibid at 165; CITES (Note 3) at article II.

¹⁶⁰ CITES (note 3) at article II paragraph 1.

¹⁶¹ Ibid.

¹⁶² J E Carey (note 156) at 1295; A J Heimert ‘How the elephant lost his tusks’ 1995-6 104 *Yale L.J.* 1473 at 1476.

¹⁶³ J E Carey (note 156) at 1295

¹⁶⁴ Article II paragraph 2.

¹⁶⁵ J E Carey (note 156) at 1295.

¹⁶⁶ Article IV of CITES.

2.3. CITES decisions related to rhinos

CITES was ratified by South Africa on 13 October 1975 as only the 15th party to sign the convention.¹⁶⁷ In 1977 in the midst of the rhino poaching crisis of the 1970s, all rhinos were placed on CITES Appendix I – thereby prohibiting all international commercial trade in rhinos.¹⁶⁸ Only in 1994 at CITES CoP9 did South Africa succeed in obtaining the partial down-listing of white rhino to Appendix II so that while trade remained restricted, it was authorised with respect to trading in live animals and for the export of legal hunting trophies.¹⁶⁹ At the same time CoP9 saw the introduction of Resolution 9.14 on *Conservation of rhinoceros in South Africa*¹⁷⁰ which encouraged parties to the Convention to, amongst others: develop a recovery plan for their rhino population; to implement adequate legislation and internal trade restrictions; reduce illegal trade and increase law enforcement cooperation to curtail trafficking in rhino horn.¹⁷¹ This resolution also incorporated a previous resolution authorising legal sport hunting with respect to Appendix I species as non-commercial trade, where such a trade would be beneficial to the species in question.¹⁷²

The emergence of the rhino horn trade in South Africa, including those legally acquired and subsequently laundered into the illegal trade, was brought to attention at the CITES CoP14 by TRAFFIC.¹⁷³ At the following meeting, CoP15 in 2010, the TRAFFIC/IUCN Report “*on the national and continental conservation status of African and Asian rhinoceros species, trade in specimens of rhinoceros, stocks management, incidents of illegal killing of rhinoceroses, enforcement issues, and conservation management strategies, with an*

¹⁶⁷ T Milliken & J Shaw (note 32) at 44.

¹⁶⁸ R Emslie & M Brooke (note 18) at 37.

¹⁶⁹ *Ibid* at 52.

¹⁷⁰ CITES (note 46); T Milliken E Emslie & B Talukdar (note 33) at 11.

¹⁷¹ *Ibid*; R Emslie & M Brooke (note 18) at 38.

¹⁷² T Milliken & J Shaw (note 32) at 44.-

¹⁷³ *Ibid* at 44; S Milledge ‘Challenges and recommended actions to address rhino horn trade involving the Republic of South Africa’ (2007) confidential TRAFFIC memo to DEAT, South Africa.

evaluation of their effectiveness,¹⁷⁴ as mandated by Resolution 9.14, was presented.¹⁷⁵ This report highlighted the escalation of poaching and the concomitant trade in rhino horn, with South Africa and Zimbabwe identified as the primary source countries and Vietnam as the key consumer country.¹⁷⁶

The CITES CoP16, which took place in Bangkok in 2013, saw the submission of the follow-up report from TRAFFIC/IUCN on the status, conservation and trade of African and Asian rhinoceroses¹⁷⁷ which indicates trends since the CoP15 Report and fulfils the mandate of Resolution 9.14. The CoP16 further saw CITES call on Vietnam to develop legislation relating to the domestic imports of hunting trophies and a database for the tracking of these trophies, and to make progress in developing and implementing the South Africa- Vietnam 2012-2017 Joint Action Plan, and to improve prosecution and investigation of Vietnamese nationals suspected of involvement in the illegal rhino horn trade.¹⁷⁸

3. The amendment of the CITES Appendices

3.1. Requirements for amending the CITES Appendices

As mentioned above, it is CITES that is responsible for the control and monitoring of international trade in species, and thus the trade in rhino horn. Article XV of CITES governs the procedure for amendments to Appendices I and II, and requires that any proposal for the downlisting of rhino to Appendix II, which would allow for the legalisation of trade, has to be made to CITES.

CITES provides that any party may bring a proposal for the amendment of these appendices 150 days before the next Conference of the Parties (CoP), after which the Secretariat will consult with the other parties to the Convention

¹⁷⁴ T Milliken E Emslie & B Talukdar (note 33) at 5; CITES CoP16 Inf 51.

¹⁷⁵ T Milliken & J Shaw (note 32) at 47.

¹⁷⁶ Ibid at 47.

¹⁷⁷ T Milliken E Emslie & B Talukdar (note 33) at 5; CITES CoP16 Inf 51

¹⁷⁸ CITES (note 46).

and other interested bodies.¹⁷⁹ The adoption of the amendment requires a two-thirds majority vote of the parties that are present at the CoP and voting (that is, not abstaining from the vote), and if successful, enters into operation 90 days after this meeting subject to any reservations adopted.¹⁸⁰

Provision is also made for amendments proposed by parties between CoPs, for which it prescribes postal procedures. In this instance the Secretariat is obliged to immediately convey the proposal to the other parties.¹⁸¹ In the event that the recommendations made by other parties and CITES in response to the proposal receive no objection, the amendment will enter into force 90 days later.¹⁸² Where there has been objection, the proposal will be subjected to a vote where a two-thirds majority is required for acceptance.¹⁸³

While the procedural requirements for bringing a proposal to lift a trade ban are clear, the contents of said proposal remain largely unprescribed. The listing process has become more scientific and objective with the introduction of the 'Fort Lauderdale Criteria' at the 1994 CoP, which established numerical standards for the listing of species and acts as a guide in the addition and removal of species from Appendices I and II.¹⁸⁴ These criteria were subsequently replaced by the 'Bangkok criteria' at the 12th CoP in 2004¹⁸⁵.

3.2. Amendment to the listing of rhino

Considering that the Black Rhinoceros is currently classified as being critically endangered by virtue of the fact that the population is an estimated 5055 in

¹⁷⁹ CITES (note 3) at article XV paragraph 1 (a).

¹⁸⁰ Ibid at article XV paragraph 1 (b) and (c).

¹⁸¹ Ibid at article XV paragraph 2.

¹⁸² Ibid at article XV paragraph 2(f)

¹⁸³ Ibid at article XV paragraph 2(g) and (j)

¹⁸⁴ J E Carey (note 156) at 1297; CITES, Criteria for Amendment of Appendices I and II, Res. Conf. 9.24 (Rev. CoP14) (1994); U Beyerlin and T Maruhn International Environmental Law 2011 Hart Publishing Ltd, Oxford, UK at 185; E Thorson and C Wold Back to Basics : An analysis of the object and purpose of CITES and blueprint for implementation 2010 International Environmental Law Project, available at <http://www.lclark.edu/live/files/4620>, accessed on 2 February 2014;

¹⁸⁵ CITES, Criteria for Amendment of Appendices I and II, Res. Conf 9.24 (Rev. CoP13) (2007); J Glazewski (note 152) at 50.

2012, it is improbable that down listing will be authorised so as to allow for trade in black rhino products.¹⁸⁶ White rhinos on the other hand are classified as near threatened.¹⁸⁷ White rhino populations currently remain sustainable, although they are at risk of decline if poaching drives the death rate to exceed the birth rate. The population reflected 20 170 by 2011.¹⁸⁸ Therefore any trade proposal will likely be aimed at removing the trade ban with respect to white rhino.

¹⁸⁶ Emslie, R (note 3); CITES (note 46).

¹⁸⁷ R Emslie (note 3).

¹⁸⁸ S M Ferreira, J M Botha and M C Emmett 'Anthropogenic influences on conservation values of white rhinoceros' 2012 *PLoS ONE* 7 (9), e45989 at 7, available at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0045989>, accessed on 3 January 2014.

CHAPTER 4 - THE DEBATE AS TO THE LEGALISATION OF TRADE AND THE WAY FORWARD

1. Introduction

In light of the current poaching crisis several different methods have been implemented and dozens of solutions considered to combat illegal rhino horn trade. The most contentious suggestion, however, has been the legalisation of trade in rhino and its products. The DEA has openly expressed its interest in submitting a proposal to CITES for the lifting of the trade ban with respect to rhinos at CoP17 in 2016. This indicates that the government has been persuaded by arguments in favour of legalised trade as a solution to the apparently indefatigable rate of poaching in South Africa. This chapter seeks to identify the primary schools of thought, and key arguments made, with respect to the viability of the legalisation of the rhino horn. Exploration and analysis of these arguments and theories will assist in determining whether, and to what extent, the legalisation of trade is a suitable option in the context of the current rhino horn crisis.

2. Theories pro-legalisation of trade

2.1. Price-inelasticity

Micheal t'Sas Rolfes maintains that there are two characteristics with regards to the rhino horn market that are of particular concern: the market size and price inelasticity.¹⁸⁹ The market size refers to the value of the market, and thus the threat posed to the endangered species, which, in the case of rhino horn, may be inversely proportional to the quantity being moved.¹⁹⁰ Price-inelasticity refers to the evident immunity the demand in rhino horn displays to increases in price, meaning that consumers are either unable or unwilling to accept substitutes.¹⁹¹ T'Sas Rolfes suggests that there are three reasons why the

¹⁸⁹ M t'Sas Rolfes (note 34) at 6.

¹⁹⁰ Ibid.

¹⁹¹ Ibid at 7.

demand for rhino may be inelastic: rhino horn is administered in small doses, meaning that the cost to traditional healers is spread out over a number of consumers; it is often used in cases of serious illness where the user is desperate and thus insensitive to price; and where bought as a symbol of status, the consumer is invariably in possession of a high disposable income.¹⁹²

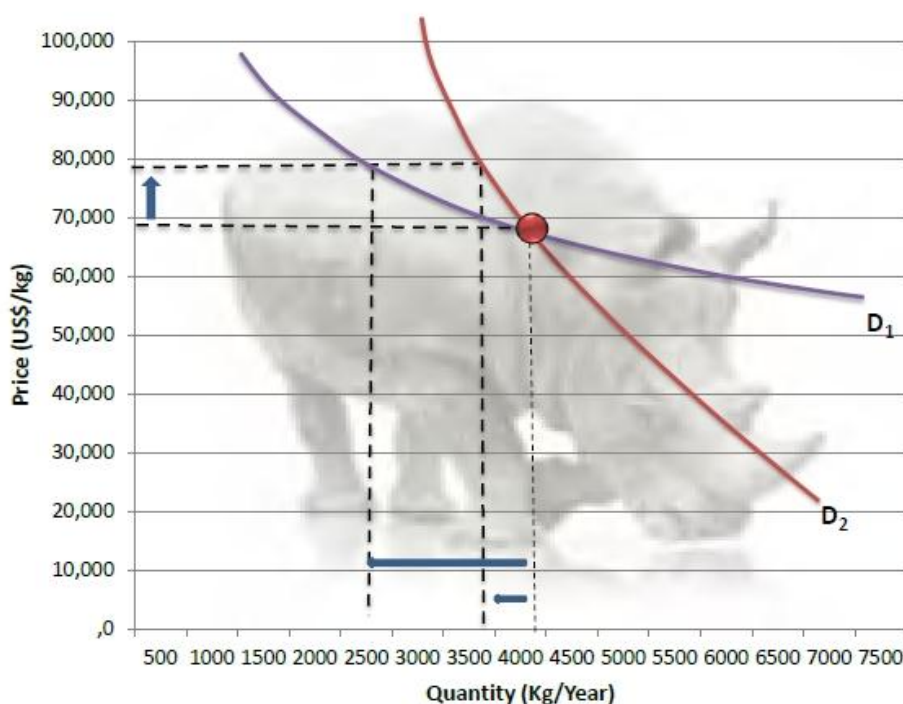


Figure 1 – Inelasticity of demand¹⁹³

The above graphic seeks to illustrate the concept of price-inelasticity. A demand curve shows what quantities of a good would be demanded by the market at various price levels. If one were to compare two demand curves, as in Figure 1, the demand curve 2 (D_2) is more inelastic than Demand curve 1 (D_1). What this entails is that a large increase in price for D_2 results in a smaller decrease in quantity than the same increase in price would cause with respect to D_1 . The demand for rhino horn has been shown to be inelastic in this nature

¹⁹² Ibid.

¹⁹³ Rhinonomics® Presentation on the dynamics of the market for rhino horn and the implications of different policy choices, presented CITES meeting in Thailand 2013 Rhinonomics (C) 2013, blueprint@blueprintgroup.co.za, available at <http://rhino-dialogues.co.za/wp-content/uploads/2012/11/CITES-RHINONOMICS-R-Presentation-MARCH-2013-THAILAND.pdf>, accessed on 5 February 2014.

as mentioned above. Thus the inelastic nature of the demand means that increasing the cost of poaching (via anti-poaching measures) and thus the price of rhino horn would have a limited effect on the quantity demanded.

2.2. Demand and supply

The central argument in support of the legalisation of trade is based on the theory that the availability of a legal supply, provided either by stockpiled horn or legal dehorning or harvesting, will cause black market prices to decline and remove the incentive behind supplying this market.¹⁹⁴ Collins et al suggest that there are two main uses of rhino horn: on the one hand rhino horn is used in Traditional Chinese Medicine (TCM) to treat ailments ranging from life threatening illnesses to colds and fevers, in this respect practitioners of traditional medicine and some individual users of horn have an interest in maintaining a constant supply; on the other hand it is purchased as a status gift and/or 'speculative asset' which increases in value with the increased scarcity of, or difficulty in obtaining, the product¹⁹⁵ The reasoning is thus, lower prices would in turn reduce the incentive behind the illegal trade, which is currently driving the actions of organised crime syndicates, and thus remove the incentive behind poaching.¹⁹⁶ Put differently, it is proposed that the demand-supply ratio with respect to rhino horn increases as a result of the suppression of supply, leading to an increase in prices, which in turn provides larger incentives for poaching.¹⁹⁷ Thus there are two possible responses, either one attempts to suppress the demand or one enhances supply to meet demand.¹⁹⁸

One of the primary arguments advanced in opposition to the above reasoning is that the lowering of market prices associated with the legalisation of trade will mean that the product is available to more consumers, and thus

¹⁹⁴ T Milliken and J Shaw (note 32) at 103.

¹⁹⁵ A Collins, G Fraser and J Snowball 'Could a regulated market approach for rhinoceros horns work in South Africa? Some practical issues and concerns' 2013 at 2.1., available at http://www.essa2013.org.za/fullpaper/essa2013_2708.pdf accessed on 3 December 2013.

¹⁹⁶ M 'tSas Rolfes (note 34) at 7.

¹⁹⁷ S M Ferreira and B Okita-Ouma (note 120) at 54.

¹⁹⁸ Ibid at 55.

demand will be stimulated.¹⁹⁹ The result would be that demand grows and again outweighs supply which will create space for an illegal market fuelled by poaching.²⁰⁰ Ironically, because of the trade ban, very little data is available as to the size and nature of the rhino horn markets.²⁰¹ In addition, Boddham-Whetham points out that neither the impact of once-off sales nor trade has yet been ascertained.²⁰² It is further asserted that demand cannot be regulated, and thus the illegal market will continue to rely on poaching to supply the needs of new consumers now capable of meeting the lowered prices.²⁰³

A response to this argument is that while this outcome is not impossible, it remains unlikely because in order for poaching to increase following the lifting of the trade ban, there would need to be 'a dramatic outward shift of the demand curve and/or a far more competitive cost function.'²⁰⁴ The demand curve would shift in this way, in the short-term, if previously law-abiding citizens become consumers under the legal market.²⁰⁵ However, these consumers tend to be more price-sensitive and are thus less likely to increase prices.²⁰⁶ Long-term factors that would spur demand would include the rising growth of the Asian market due to increasing incomes and aggressive marketing of rhino horn products.²⁰⁷ T'Sas Rolfes argues that the growth of the market will occur irrespective of the legality of the market, and the latter is easier to address in a legal market than an illegal one.²⁰⁸ The ideal course of action would involve the simultaneous increase of supply and the reduction in demand, however the

¹⁹⁹ Ibid at 56.

²⁰⁰ Milliken T and Shaw J (note 32) at 105.

²⁰¹ M 'tSas Rolfes (note 34) at 7.

²⁰² L Boddham-Whetham 'To Legalise or not to legalise?' available at http://www.savetherhino.org/rhino_info/thorny_issues/legalising_the_horn_trade/to_legalise_or_not_to_legalise, accessed on 5 May 2013.

²⁰³ S.M.P Scholtz 'The survival of the rhino in South Africa, for South Africa—a critical approach' 2012 Krugersdorp, *The Living Ghoen* at 36, available at http://www.rhinoresourcecenter.com/index.php?s=1&act=refs&CODE=ref_detail&id=134672254, accessed on 10 November 2013.

²⁰⁴ M 'tSasRolfes (note 34) at 16.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

²⁰⁸ M 'tSas Rolfes (note 34) at 16.

efficacy of demand reduction strategies is brought into question, as discussed below.

Of course whether the lowering of prices is immediately possible is also open to question because of the potential costs involved in implementing captive breeding programmes (CBPs) for the purpose of harvesting enough rhino horn to influence the market. A key concern is the cost of security for these CBPs as they call for large tracts of land, and are vulnerable to poaching by the syndicates whose income and market power they threaten.²⁰⁹ Collins et al suggest that because CBP is so costly, it would necessitate the arrangement of subsidies or soft-loans for the provision of security so as to allow for sufficient time within which to build up a sustainable herd of appropriate proportions to enter the market for horn.²¹⁰ It is, however, arguable that the proceeds from the sale of rhino horn and trophy hunting could be ploughed back immediately into reinforcing security measures. Theoretically this would mean that as rhino breeding facilities are being established, anti-poaching measures will be enhanced accordingly. This provides an attractive option for private landowners, provided that the system for the return of proceeds from rhino horn sales to conservation measures is regulated within the appropriate framework.

²⁰⁹ Collins, G Fraser and J Snowball (note 195).

²¹⁰ Ibid at 4.

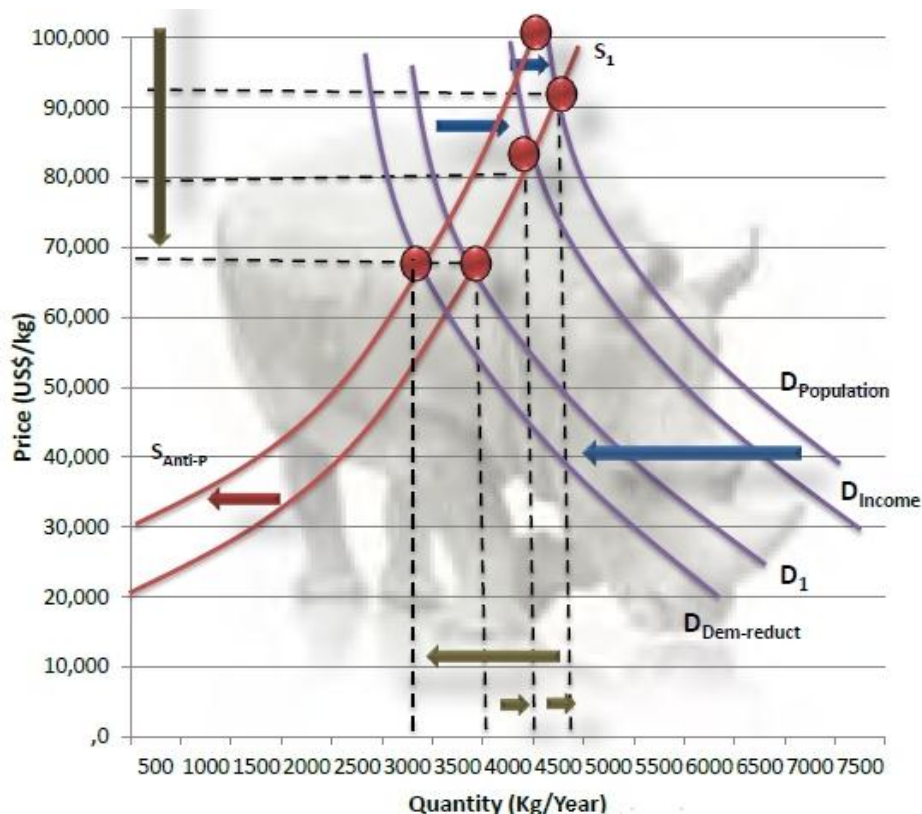


Figure 2 – Market forces in the rhino horn market

The graph above illustrates the concept of supply and demand, and how they may be affected by different methods of influencing either supply or demand (excluding trade). S_1 is the supply curve for the rhino horn market. It represents the various quantities that suppliers (including poachers) are willing to supply at various price levels. The point at which D_1 and S_1 intersect is called the equilibrium price. This is the point where quantity supplied equals quantity demanded and establishes an equilibrium market price.²¹¹

The inevitable growth in both income and population of the consumer market for this good will shift the demand curve from D_1 to D_{Income} and then $D_{Population}$. This causes the equilibrium price to rise to the new intersection point of the demand curve and the supply curve leading to a higher market price and quantity. In essence what is happening is that given that the supply side stays the same, increased demand has pushed up the market price so that suppliers

²¹¹ N G Mankiw & M P Taylor *Microeconomics* (2006) Thomson Learning, London, UK at 74.

can fetch higher prices and are thus incentivised to sell larger quantities. This translates into increased incentive to poach rhino to supply the illegal trade.

As suggested above, this can be combatted using demand reduction strategies to shift the demand curve left to $D_{\text{Dem-reduct}}$. Finally, poaching measures can be put in place that would increase the cost of poaching which would shift the supply curve left to $S_{\text{Anti-P}}$ which would increase the equilibrium price but lower the equilibrium quantity.

2.3. 'Sustainable use approach'

The abovementioned argument which suggests that the proceeds of rhino horn be fed back into the protection and farming of the rhino, is related to what has been termed the 'sustainable use approach'. This approach essentially advocates the use of wildlife to the benefit of the landowner supporting it.²¹² The four key concepts that constitute this approach are proprietorship, price, subsidiary and collaborative adaptive management.²¹³ Of particular relevance is the price-proprietorship hypothesis which claims that 'if wildlife is valuable, and if this value accrues to landholders, then there is a high probability that landholders will manage wildlife sustainably, just as they would manage livestock.'²¹⁴

Hence the theory is that income generated as a result of the sale of rhino horn could act as an incentive for private and State stakeholders to retain rhinos and encourage their growth in numbers and range.²¹⁵ This is a valuable consideration as there is a current fear that without the legalisation of trade, private owners will be disinclined to keep rhinos on their properties.²¹⁶ The rationale being that the benefits of increased income from legal Rhino horn

²¹² B Child 'The Sustainable use approach could save South Africa's rhinos' 2012 *S Afr J Sci* 108(7/8) at 2 available at <http://www.sajs.co.za/sustainable-use-approach-could-save-south-africa%E2%80%99s-rhinos/child-brian>, accessed on 10 November 2013.

²¹³ Ibid.

²¹⁴ Ibid.

²¹⁵ T Milliken and J Shaw (note 32) at 103-4.

²¹⁶ Ibid at 104.

sales would offset the costs of anti-poaching and intelligence-gathering activities.²¹⁷

This approach is increasingly attractive in light of the inability of the State to provide financial assistance, and the absence of international funding sources, as the burden of security costs is then largely placed on the shoulders of rhino owners and custodians.²¹⁸ Diminished government funding for conservation combined with the increased cost of conservation mean that the requisite levels of field management and protection for rhinos will be difficult, if indeed possible, to maintain.²¹⁹

Rhino farming would thus provide a process whereby private rhino owners can harvest horn to be sold on a legalised market.²²⁰ It could potentially also pose an opportunity for community participation through partnerships between the private sector and/or the State, and communities living within and near reserves or parks.²²¹ While this encourages 'sustainable economic empowerment', it also has the added benefit of reducing the susceptibility of impoverished local communities to recruitment into the poaching system.²²² South Africa echoed this sentiment at the CoP16 conference stating that a zero quota trade ban on hunting trophies for a list of specimens (including white rhino) as proposed by Kenya would impoverish bona fide hunting and associated revenues.²²³

²¹⁷ T Milliken and J Shaw (note 32) at 103.

²¹⁸ Ibid.

²¹⁹ R Emslie and M Brooks (note 18) at 33.

²²⁰ Department of Environmental Affairs (note 9) at 23.

²²¹ Ibid.

²²² Ibid.

²²³ CITES CoP16 Prop.10 available at <http://www.cites.org/sites/default/files/eng/cop/16/prop/E-CoP16-Prop-10.pdf> accessed on 10 January 2014 at 9.

3. Theories against legalisation

3.1. Laundering of rhino horn

Another key argument against the legalisation of trade is that it will simply result in the laundering of illegal horn into the legal market. Several examples are available of trade in wildlife where legal trade has existed parallel to, and has been undermined by, illegal trade.²²⁴ In light of the lack of enforcement demonstrated by Vietnam there is scepticism as to whether user countries possess the requisite political will and oversight capacity so as to adequately oversee and monitor trade in such a way as to avoid laundering of horn.²²⁵ This lack of political will is further evidenced by China's statement at a CoP16 conference where China acknowledged the need for international cooperation but noted that the ultimate responsibility for conservation lies with the range countries.²²⁶

T'Sas Rolfes states that while legalised trade may reduce the transaction costs of illegal trading, it will also reduce its profit margins. Thus a legal trading mechanism could discourage rather than encourage illegal trade if designed properly.²²⁷ He has also suggested that that the laundering of illegal horns may be mitigated by measures including DNA fingerprinting which would allow for differentiation between legal and illegal horn at different points in the legal trade.²²⁸ One could, however, counter that the implementation of this kind of technology raises concerns in and of itself, including how the DNA analysis would be funded, enforced and monitored.²²⁹

²²⁴ T Milliken and J Shaw (note 32) at 105.

²²⁵ Ibid.

²²⁶ International Institute for Sustainable Development '*Earth Negotiations Bulletin*' available at <http://www.iisd.ca/cites/cop16/> accessed on 8 February 2014 at 3.

²²⁷ M t'Sas Rolfes (note 23) at 28.

²²⁸ M t'Sas Rolfes (note 34) at 16; T Milliken and J Shaw (note 32) at 104.

²²⁹ T Milliken and J Shaw (note 32) at 104.

3.2. Demand Reduction

Demand reduction strategies are premised on the idea that through education and campaigning the demand for rhino horn can be reduced, if not eradicated. This would cause the disparity between supply and demand, caused by the trade ban, to be narrowed. The demand reduction approach is thus cited by opponents of the legalisation of trade who maintain that public education supplies a powerful mechanism for long-term protection of endangered species.²³⁰ The reasoning is that 'education addresses the central and most influential cause of species endangerment: the consuming market and its control over wildlife.'²³¹

This strategy may not be sufficient in that: it assumes that rhino horn has no medicinal value as maintained by Western medicine and that this will be accepted by those that subscribe to TCM practices, whereas the latter has been accepted for centuries in Eastern culture; and general campaigns might not have the desired effect on the actual consumers that are prepared to pay the high prices for rhino horn due to an entrenched belief in its medicinal value and/or its status-value in defiance of Western culture.²³² The last point aligns with the theory expressed before that rhino horn is often obtained as a status gift or speculative asset retained for its potential scarcity and its increasing value. Some critics contend that awareness and education efforts have thus far failed to impact the present demand, and are thus insufficient as a solution to the poaching trend, even when combined with other anti-poaching methods such as increased enforcement.²³³

While it would be ideal to combine demand reduction with the legalisation of trade so as to bring supply and demand to equilibrium, this may not be

²³⁰ S Patel (note 154) at 207.

²³¹ Ibid at 208.

²³² M 'tSas Rolfes (note 34) at 14.

²³³ D Biggs et al (note 146) at 1039; R Martin A legal Trade in Rhino Horn: Hobson's Choice 2012 Rhino Survival Trust, Johannesburg, South Africa, at 2, available at <http://www.rhinoreourcecenter.com/index.php?s=1&act=pdfviewer&id=1331766338&folder=133>, accessed on 5 January 2014.

possible as the two strategies do not operate together comfortably. Due to the fact that in most consumer countries trade in rhino horn is banned, the legalisation of trade would require the lifting of these bans and appropriate changes to domestic legislation.²³⁴ If one is simultaneously attempting to educate consumers as to the properties of rhino horn and legalising trade, the message sent to consumers is mixed.²³⁵ However, this does not preclude education as to the plight of the rhino in range states and the operation of the system of supply, which could encourage consumers to use horn sourced by legal rather than illegal means.

3.3. Enforcement measures

Another suggestion is that in lieu of a legal trade, poaching would be better addressed by way of increased enforcement measures. These include heavier sentencing and improved prosecution of those who are arrested in connection with suspected rhino poaching activities, and other methods such as dehorning, poisoning of horn, anti-poaching patrols, and the use of drones and helicopters. While all of these measures are being implemented, or at least considered, in South Africa, it does not appear that any are succeeding in stemming the tide of poaching incidents.

All the field-protection measures mentioned above are costly, and the cost is most often borne by rhino owners and managers on an on-going basis.²³⁶ However, these steps to increase security, combined with public awareness and fundraising campaigns, have not had a deterrent effect in relation to poaching in private and public parks.²³⁷ In fact dehorning, without any concomitant anti-poaching measures, has ceased to be effective due to the extreme prices for horn which mean that even the stump is highly valuable.²³⁸ Due to the rate at which rhino horn grows, dehorning has to be undertaken

²³⁴ T Milliken and J Shaw (note 32) at 105.

²³⁵ L Boddham-Whetham (note 202).

²³⁶ M 'tSasRolfes (note 34) at 13.

²³⁷ A Collins, G Fraser and J Snowball (note 195) at 2.1.

²³⁸ PA Lindsey and A Taylor (note 126) at 45

regularly which is an additional expense.²³⁹ Obtaining the permit that is required for the removal of horn is often considered to be a burdensome and lengthy process, which is also constitutes a potential liability due to the fact that it involves revealing the whereabouts of rhinos.²⁴⁰

In relation to the arrests made, these are most often arrests of on-the-ground-poachers, or movers of horn, not leaders of syndicates, and prosecution is usually slow, while the courts remain hesitant to impose heavy penalties.²⁴¹

4. Case studies: elephant and vicuña

In evaluating whether or not a legalised trade is appropriate with respect to rhino horn, it is instructive to consider comparable wildlife trades.²⁴² There are a number of species which may be suited to this purpose, however this paper will limit its scope to the vicuña and the African Elephant. The present enquiry will consider the vicuña as it has been suggested that the case of the vicuña is directly comparable to that of the rhino, and furthermore it is considered to be an example of the successful recovery of a species nearing extinction and implementation of a legal trade.²⁴³ The second case study will consider the African Elephant as they are suffering prosecution for their ivory similar to that of rhino for their horn, and the ivory trade has a long history. In addition the African Elephant case study will serve as a precursor to the analysis of the proposed model for trade in African Elephant ivory in the chapter that follows.

²³⁹ Ibid.

²⁴⁰ Ibid.

²⁴¹ A Collins, G Fraser and J Snowball (note 195) at 2.1.; R Emslie and M Brooks (note 18) at 34; The Department of Environmental Affairs 'National Environmental Compliance and Enforcement (NECER) 2012 / 2013 report' at 57-64 available at https://www.environment.gov.za/sites/default/files/docs/necer_report2012_13.pdf, accessed on 6 January 2014.

²⁴² Comparable wildlife trades include the trades in crocodile hides and tiger bones.

²⁴³ Department of Environmental Affairs (note 9) at 27.

4.1. Vicuña

The vicuña is a South American animal, much like a llama, which is sought after for its wool.²⁴⁴ Vicuña populations plummeted due to exploitation so that by the 1960s they were threatened with extinction, with a reported low of 6000 animals surviving in 1965.²⁴⁵ In response to this crisis Argentina, Bolivia, Chile, Peru and Ecuador signed the Convention for the Conservation of Vicuña in La Paz in 1969 (the La Paz Agreement).²⁴⁶ This agreement calls upon member states to prohibit and repress any hunting of vicuña or trade in their products, or articles made from these products, at a domestic and an international level.²⁴⁷ The idea behind the La Paz Agreement was to give vicuña a chance to recover in the hope that this would eventually allow for the live capture and shearing of these animals for their wool.²⁴⁸ In addition vicuña were listed under Appendix I to CITES in 1975 due to the fact that the population faced extinction.²⁴⁹

Following the implementation of the Vicuña Convention and CITES listing, populations rose to about 343 500 by 2007.²⁵⁰ As a result a number of vicuña populations have been downlisted to CITES Appendix II, thereby authorising trade in wool from live-shorn populations and derived products subject to strict regulation.²⁵¹ Populations subject to Appendix II include those of Bolivia and Peru, as well as certain populations in Argentina and Chile.²⁵² The amended listings are reflective of an international policy shift from strict

²⁴⁴ Vicuña are also used for their meat, viscera, bones and hide.

²⁴⁵ A Kiss and D Shelton *International Environmental Law* 3rd Ed (2004) United National Environment Programme, Transnational Publishers, Inc., Ardsley, NY, USA at 231; S Lyster *International Wildlife Law* (1985) Grotius Publications Limited, Great Britain at 89.

²⁴⁶ A Kiss and D Shelton (note 245) at 231..

²⁴⁷ Ibid.

²⁴⁸ S Lyster (note 245) at 89.

²⁴⁹ Department of Environmental Affairs (note 9) at 27.

²⁵⁰ G Lichtenstein 'Vicuna conservation and poverty alleviation? Andean communities and international fibre markets' 1 February 2010 4 *International Journal of the Commons* 100 at 102.

²⁵¹ G Lichtenstein et al *Vicugnavicugna* 2008 IUCN 2013, IUCN Red List of Threatened Species, Version 2013.2., available at www.iucnredlist.org, accessed on 10 February 2014.

²⁵² Ibid.

preservation to sustainable use.²⁵³ Thereafter, in 1979, several South American countries signed the Convention for the Conservation and Management of the Vicuña in Lima (the Lima Convention), naming the Andean people as the primary beneficiaries of future vicuña use.²⁵⁴ The Lima Convention authorised limited trade domestic trade in vicuña under strict government control, and only where the animals are culled because a particular area has reached grazing capacity.²⁵⁵

McAllister et al remarked that because the vicuña trade ban closed down the high-value market effectively, poaching incentives declined dramatically.²⁵⁶ While poaching wasn't completely eradicated, it has the potential to increase substantially upon the lifting of the ban as illegal products might easily find their way onto the legal market.²⁵⁷ It is for this reason that McAllister et al suggest that in order for the trade in vicuña to provide the lucrative economic benefits it offers local communities, it would have to be combined with effective policing and appropriate certification to ensure that the product is from legal sources.²⁵⁸

The trade in vicuña has unfortunately been characterised by issues relating to equity and poor rewards to local farmers, however the recovery of the species has displayed certain edifying features: the initial Appendix I listing provided an effective ban on lethal harvesting of the animals; the formal Convention mentioned above was signed by the range states where the species occurred; once recovery began, the appropriate institutions were established under the domestic legal frameworks and vicuñas were downlisted to Appendix II; and finally, there was an explicit commitment ensuring that local communities were included in the trade, and benefited therefrom.²⁵⁹

²⁵³ RRJ McAllister 'Legalising markets and consequences for poaching of wildlife: Vicuña as a case study' 2009 90 *Journal for Environmental Management* 120 at 121.

²⁵⁴ R B Martin et al (note 13) at 10.

²⁵⁵ S Lyster (note 245) at 91.

²⁵⁶ RRJ McAllister (note 253) 121.

²⁵⁷ Ibid at 121, 126.

²⁵⁸ RRJ McAllister (note 253) at 127.

²⁵⁹ R B Martin et al (note 13) at 10.

Jacobson argues that there is an almost complete parallel between vicuña and rhino because: both animals produce a valuable product which grows, and may be removed without harm to the animal; both involve populations in close proximity to impoverished communities; and both have been threatened with extreme poaching activities.²⁶⁰ It is thus conceivable that the success of the vicuña trade could be used in support of pro-trade arguments in the context of rhino horn, particularly in the sense that it demonstrates application of the sustainable use theory.

However, while the similarities between vicuña and rhino horn are compelling, it is apparent that there are important differences that must be considered. Firstly, the vicuña market is classified as an oligopsony, meaning that there are a small number of buyers and a potentially large number of sellers.²⁶¹ The market for rhino horn, on the other hand, features an unknown number of buyers. It may be speculated that because of the uses of rhino horn, it would have a sizeably larger base for which supply is restricted by the illegality of the trade. Secondly, part of the success of the recovery of vicuña lies in the total domestic and international ban on trade in their products, reinforced by regional cooperation and enforcement, which enabled a gradual shift towards a trade regime. This is distinguished from the rhino horn situation because the illegal trade in rhino horn flourishes despite the implementation of both a domestic and international trade ban.

Perhaps lessons that may be taken from the vicuña case study are the importance of regional cooperation and community participation in successful conservation. The vicuña trade also provides a valuable example how sustainable use may be implemented without detriment to the species. This is of relevance in the context of rhino horn because it provides evidence that increased poaching and laundering of illegal product through legal channels

²⁶⁰ T Jacobson 'Rhino and Vicuna: A Parallel' 2012 Unpublished, available at http://www.rhinosourcecenter.com/pdf_files/133/1331765741.pdf; accessed on 10 February 2014; Department of Environmental Affairs (note 9) at 27.

²⁶¹ G Lichtenstein (note 241) at 116.

need not necessarily pose the degree of threat to rhino populations as some envisage.

4.2. African Elephant Ivory

Alternatively, one may compare the trade in rhino horn to that of African elephant ivory. This is of particular relevance as CITES is currently investigating a possible legal trade in elephant ivory due to the persistent demand in Asia and the recent upsurge in poaching. However before one can do so, one must be cognisant of the similarities and differences between the two as these impact the degree to which they can be compared.²⁶² Both the elephant and the rhino provide a product that commands an extremely high price, and are valued for the revenue they bring in through tourism and through lucrative trophy hunts.²⁶³ Furthermore, both animals are difficult, and therefore costly, to protect from poachers. The most important difference, on the other hand, is that rhino horn regrows and can be harvested or removed from the animal without harm, while elephant ivory can only be harvested from the dead animal.²⁶⁴ In addition, rhino horn and ivory serve different purposes: elephant ivory essentially holds ornamental value, while rhino horn is considered to have both medicinal value, and ornamental (it is the prized material for the creation of carved dagger handles in Yemen).²⁶⁵ Furthermore rhino horn is easier to smuggle as it can be ground to a powder and concealed, whereas ivory must usually be in raw form as it is destined to be carved.²⁶⁶

The comparison between rhino horn and elephant ivory is compelling because of the correlation between the poaching crisis facing the two. It is further useful to consider them in tandem because they face many of the same challenges in combating poaching. However, the means by which the products

²⁶² Department of Environmental Affairs (note 9) at 27.

²⁶³ A J Heimert (note 162) at 1480.

²⁶⁴ *Ibid* at 1474.

²⁶⁵ M Glennon 'Has International Law Failed the Elephant?' 1990 84 *AMER. J. INT'L* 1 at 25-6.

²⁶⁶ A J Heimert (note 162) at 1503-4; M Glennon (note 265) at 26.

can be obtained is of particular relevance in structuring a trade and developing a system of regular supply.

In 1976, at the inception of CITES, the African elephant was listed under Appendix II. Trade was subject to a complex registration process (whereby all tusks were registered with CITES), and each state was required to set a quota indicating how many tusks would maintain its elephant population.²⁶⁷ Regardless, elephant populations plummeted in the 1980s due to poaching for their ivory as a result of both legal and illegal trade and ‘exacerbated by a number of factors—unstable economies and the need for new sources of foreign exchange, political corruption in some nations and the greater availability of automatic weapons.’²⁶⁸ Following the drastic decline in elephant populations between 1979 and 1989, the introduction of a resolution to reclassify the African elephant under Appendix I in 1990 effectively saw the introduction of a trade ban in elephant ivory.²⁶⁹

The ivory trade ban saw a notable drop in the price of ivory and thus an accompanying decline in poaching as the incentives fell away.²⁷⁰ Potential reasons cited for this decrease in demand for ivory include unwillingness to purchase ivory due to the stigma created by the ban, and large stockpiles amassed in the 1980s.²⁷¹ In 1997 southern African countries campaigned for the reclassification of African elephant into Appendix II with respect to the elephant populations of certain range states.²⁷² Initially this proposal was rejected as parties were concerned that there would be inadequate monitoring of such a

²⁶⁷ J Vandergrift ‘Elephant Poaching: CITES failure to combat the growth in Chinese demand for ivory’ 2013 31 *Va. Env’tl. L.J.* 102 at 107; S B Edwards III ‘Legal trade in African Elephant Ivory: Buy Ivory to Save the Elephant?’ 2001 7 *Animal L.* 119 at 125.

²⁶⁸ D Hunter et al *International Environmental Law and Policy Fourth Edition* 2011 Thomson Reuters/Foundation Press, New York, USA at 1081.

²⁶⁹ S B Edwards (note 267) at 126; P Stoett ‘To Trade or Not to Trade—The African Elephant and CITES’ 1996-7 52 *Int’l* 567 at 567.

²⁷⁰ J Vandergrift (note **Error! Bookmark not defined.**) at 108; P Stoett (note 269) at 570.

²⁷¹ D Stiles ‘CITES—Approved Ivory Sales and Elephant Poaching’ July 2008-June 2009 45 *Pachyderm* 150 at 153, available at <http://www.pachydermjournal.org/index.php/pachy/article/viewArticle/14>, accessed on 2 January 2014.

²⁷² J Vandergrift (note 267) at 109.

trade, however eventually a compromise was reached directed to conservation activities, .²⁷³ The result was an annotated Appendix II listing with respect to certain elephant populations for the purposes of an experimental one-off sale subject to the following conditions: that the consignment does not include poached ivory; that net revenues from sales be directed to conservation activities; that Namibia, Botswana and Zimbabwe remove their reservations to the Appendix I listing of the African elephant; and that the CITES Security Committee is satisfied that identified enforcement and control measures have been addressed.²⁷⁴

This downlisting was followed by two one-off sales of ivory in 1999 and in 2008, which have been cause for much debate and controversy.²⁷⁵ The controversy stems from the debate as to whether one-off sales are the most effective approach to conserve the elephants, with proponents of trade arguing that the sales provide an incentive to conserve the animals, while others argue that they facilitate the marketing of illegal ivory.²⁷⁶ The latter argument against the legal trade in ivory maintains that illegal ivory is laundered in the process of legal sales, which formed the basis for opposition of several African countries to the initial one-off sale.²⁷⁷ Further the criticism levelled against the one-off legal sales is that it they are responsible for increased public demand.²⁷⁸ The compromises around trade were influenced substantially by the development of accurate monitoring programs (Monitoring Illegal Killing of Elephants, and the Elephant Trade Information System) to assess the effect of one-off sales on illegal trade and poaching.²⁷⁹ It is notable that while the proposed trade in rhino horn is not one of isolated sales, the arguments in opposition thereof are clearly

²⁷³ D Hunter (note 268) at 1082.

²⁷⁴ CITES CoP10 Decisions 10.1 and 10.2, available at <http://www.cites.org/sites/default/files/eng/cop/10/E10-Decisions.pdf>, accessed on 7 February 2014; J Vandergrift (note 267) at 109.

²⁷⁵ *Ibid* at 110.

²⁷⁶ EH Bulte et al 'The effects of one-off ivory sales on elephant mortality' 2007 71(2) *Journal of Wildlife Management* 613 at 613.

²⁷⁷ AM Lemieux and RV Clarke 'The international ban on ivory sales and its effects on elephant poaching in Africa' 2009 49 *Brit. J. Criminol.* 451 at 454.

²⁷⁸ D Stiles (note 271) at 150.

²⁷⁹ D Hunter (note 268) at 1083.

similar to those levelled against any legal trade in elephant ivory. It has, however, become apparent that the impact of the one-off sales remains uncertain. Bulte et al attempted to draw conclusions from the data available after the 1999 sales, and determined that there is no support for the hypothesis that the one-off sales had a significant impact on poaching.²⁸⁰ This conclusion is corroborated by Stiles, who states that there is no evidence to suggest that the 1999 sales cause an increase in demand.²⁸¹ If anything, it is probable that the one-off sales acted as a form of pressure release by increasing supply, and by incentivising conservation by way of letting range states benefit from their elephant populations.²⁸²

The DMM Report also posits that evidence of a connection between one-off sales and increased levels of illegal trade has yet to be provided.²⁸³ This document points out further that the illegal trade will continue for as long as the ban is in place, regardless of legal ivory in the system.²⁸⁴ Stiles concurs in this assessment, and suggests that the reason for the increased drive in demand is economic development in consumer countries such as China (where ivory is seen as a symbol of status and an auspicious material), combined with the depletion of the stockpiles of the 1980s.²⁸⁵ There are evident parallels between this explanation for the fluctuation in demand for ivory and for demand for rhino horn in that they both correspond with economic changes in Asia and potentially follow the depletion of stockpiles.

Following the increase in poaching incidents over the last few years, Stoett argues that while a complete ban with respect to ivory may ultimately be detrimental, the resumption of trade without the appropriate controls will be equally unsuccessful.²⁸⁶ He refers to the conditions of the agreement with

²⁸⁰ EH Bulte (note 276) at 617.

²⁸¹ D Stiles 'The ivory trade and elephant conservation; 2004 31(4) *Environmental Conservation* 309 at 318.

²⁸² EH Bulte (note 276) at 617.; D Stiles (note 281) at 318.

²⁸³ R B Martin et al (note 13) at 17.

²⁸⁴ Ibid.

²⁸⁵ D Stiles (note 271) at 152; J Vandergrift (note 267) at 114.

²⁸⁶ P Stoett (note 269) at 572.

Zimbabwe in 1997 (relating to the temporary lifting for the one-off sale in 1999) which largely foreshadow the principles and factors espoused by the Report: it is important that only stockpiled horn be traded and no elephants be killed for that purpose; that trade be halted immediately upon discovery of an infraction; and that resulting profits be invested into conservation. He also adds that it would be beneficial to do away with the 'middle-man', as the element responsible for large mark-ups and exploitation of poachers.²⁸⁷ Stiles proposes that the legalisation of trade is the solution to vesting control of the ivory market, but that the implementation of any such trade would be premature until 'ivory demand and the management and regulation problems are addressed.'²⁸⁸ Such demand may be limited either through the creation of a stigma around the purchase of ivory that will permeate regardless of its legality, or by engaging ivory carvers in conservation process as they are a vital link in the supply chain.²⁸⁹

Starting in 2006, the number of elephants poached in Africa has risen steadily despite the present trade ban, reaching its highest levels in 2011.²⁹⁰ The data acquired through MIKE, which measures trends in levels of illegal trade and identifies factors associated with those trends, demonstrates this increase.²⁹¹ This data also shows that in 2012 and the first half of 2013, the trend maintains levels close to those of 2011, the primary factors influencing the illegal trade being poverty, governance and demand.²⁹² This case study is thus particularly compatible with that of the rhino, because in both cases there has been a marked increase in poaching despite the CITES trade ban being in place, necessitating the exploration of the legalisation as a potential solution.

²⁸⁷ Ibid.

²⁸⁸ D Stiles (note 281) at 319.

²⁸⁹ D Stiles (note 281) at 319.

²⁹⁰ J Blanc et al *Status of African elephant populations and levels of illegal killing and the illegal trade in ivory: A report to the African Elephant Summit December 201,3* prepared by the CITES Secretariat, IUCN/SSC African Elephant Specialist Group and TRAFFIC International at 4, available at https://cmsdata.iucn.org/downloads/african_elephant_summit_background_document_2013_en.pdf, accessed on 20 January 2014.

²⁹¹ Ibid.

²⁹² Ibid at 4, 8.

The one-off sales are of interest because they were subject to the same arguments posed by proponents and opponents of trade as are posed with respect to rhino horn. The results of these sales remain uncertain, however it seems that the opening of trade for the purpose of sales did not have a discernable effect on poaching. At the same time it provided funds to supply states which are needed for conservation. These are relevant considerations in the context of rhino horn as they give an indication of how trade might affect demand, although one must bear in mind the differences between the two products.

5. To legalise or not?

The decision of whether or not the trade in rhino horn should be legalised lies in weighing up the different schools of thought on the topic, bearing in mind the reality currently being faced by rhino range states such as South Africa. In light of the government's decision to support a proposal for trade, it would appear that, despite the array of measures being implemented nationally to combat poaching, the authorities still believe it is necessary to radically alter the regime governing trade in rhino and its products.

The economic arguments in favour of legalised trade are immediately attractive as the problems posed by the immunity of demand to increases in price are evident. The exorbitant prices fetched by rhino horn as a result of the trade ban invite the involvement of international organised crime syndicates who then vest control of the illegal trade, making it increasingly difficult to counteract poaching and smuggling of horn. It is the price-inelasticity of demand that makes the argument of increased enforcement particularly problematic in that the more risk that is involved in obtaining the product by illegal means, the higher prices will rise because supply will be restricted and demand will not abate. Given this highly-inelastic demand, more enforcement will limit supply which will lead to a much sharper increase in prices rather than a drop in the quantity demanded. This increase in prices maintains the incentive to risk the penalties associated with poaching and exporting rhino horn.

The aforementioned point lends itself to the argument that the only way to restore balance to the trade would be for supply to rise so as to meet demand. It is, however, a valid concern that demand may be stimulated to exceed supply at the instigation of a legal trade. This is the case because we know so little about the nature and extent of the demand or how it is influenced. It is for the same reason that we cannot definitively determine whether the trade ban is more beneficial than harmful or vice versa—while the rhino population previously flourished under restrictive trade, it now plummets despite the trade ban.

The price-inelasticity of demand further emphasises an important flaw in the demand-reduction approach. The fact that consumers are not affected by the increases in price means that they are unwilling to utilise alternatives or forgo the purchase of rhino horn due to the value they place on it, whether for reasons of status or tradition. Thus the efficacy of measures designed to reduce demand through education and awareness strategies will be too limited, and potentially too slow, to have the desired effect of reducing poaching in time. It would be more practical to raise awareness about the poaching of rhino in the context of luring consumers towards the legal market, and thus as part of a combined approach.

Notwithstanding the above, a persuasive argument can be made for the sustainable-use approach. This approach has been applied as a successful conservation strategy in South Africa in the past and it could be argued that trophy hunting, a form of sustainable-use, is what kept the poaching tide at bay for some time before it developed into a crisis. What is most compelling about this approach is that it allows landholders to benefit from their wildlife in such a way that those benefits can be incorporated back into conservation efforts, including anti-poaching measures. It thereby allows for a multi-pronged approach to the rhino poaching crisis by way of increased protection and enforcement measures at a domestic level, and the creation of a legal market at an international level. Importantly, sustainable-use addresses

one of the key concerns with respect to rhino on privately owned land, which is that landowners will sell their rhino or allow them to be poached because of the absence of an appropriate incentive to keep them on their property.

Further support for the sustainable-use approach is found in the vicuña case study. Firstly it demonstrates that a legalised trade can be workable and positively benefit local communities. This is of particular relevance in the South African context where there are underprivileged local communities who have very little incentive to assist in the protection of natural heritage from which they cannot benefit. Secondly, the Convention for the Conservation and Management of the Vicuña demonstrates the power of regional cooperation in the protection of shared assets. This also finds application in the South African context as we share a porous border with Mozambique, and the poaching crisis is also afflicting other Southern African states.

The enforcement approach is the primary strategy being adopted by South Africa at the moment, characterised by stricter penalties for crimes involving rhino poaching, and increased and varied anti-poaching measures. The result has not been a decline in poaching activities, but rather an escalation in poaching as well as violence. It would seem that in the South African context the legalisation of trade is the only option left, which is perhaps why the DEA has proposed the legalisation of trade. It seems unlikely that South Africa will be able to make further financial provision or capacity available so as to reinforce anti-poaching measures and enforcement measures, as it appears that all possible alternatives to trade are being explored and utilised, and rhino are already being prioritised.

Finally, the points raised around the laundering of illegally obtained rhino horn are of particular concern in the context of the trade in rhino horn because of uncertainty surrounding the willingness of Vietnam, as a consumer, to police a trade, and the capacity of South Africa to monitor trade as a supply country. Proposed solutions to this include technological identification mechanisms

combined with a trade structured so as to minimise the opportunity for the entry of illegal product into the legal market. While it may be asserted that these solutions are expensive and administratively burdensome, it seems that maintaining the necessary enforcement measures would be equally, if not more, expensive and burdensome in the long term.

The situation is summarised by Biggs et al. They posit that studies of other wildlife products suggest that a legal trade may reduce the incentives to poach if particular conditions are satisfied. Essentially they propose that regulators must be able eradicate any laundering of illegal product, the legal product must be easier and more reliable and cost effective to obtain than illegal product, trade does not stimulate demand, and consumers are willing to accept farmed/harvested product as opposed that of a wild animal.²⁹³

If the foregoing arguments and considerations are weighed it seems that the only way forward is through legalised trade in line with the sustainable-use approach. The most effective way to address the poaching crisis would be a combined approach of legal trade, strict enforcement measures against the illegal trade, and potentially awareness campaigns to alert consumers as to the implications of buying on the illegal market and the benefits of buying on the legal market. The proposal drawn up to for the amendment of the CITES appendix for the purpose of lifting the ban should address all these concerns, and include a mechanism for the halting of the trade in the event that it does not operate as intended. The above analysis proposes an answer to the question whether trade should be legalised with respect to rhino horn. This discussion leaves the remaining questions of how likely it is that a proposal for trade will be accepted by CITES, and if so, what would such a trade look like. These questions will be explored in the next chapter, partly by considering the model for trade in African elephant ivory DMM Report as the beginnings of a 'blueprint' for a trade in rhino horn.

²⁹³ D Biggs et al (note 146) at 1039.

CHAPTER 5 - A POSSIBLE MODEL FOR TRADE?

1. What is the likelihood of a trade proposal being accepted?

As discussed under chapter 3, the amendment of a listing requires a proposal that wins the vote of a two-thirds majority of the parties to CITES and little indication is given of what such a proposal would contain. The difficulty in preparing a successful proposal is illustrated by the repeated attempts to propose trade in African elephant ivory, dating back to 1990. Currently the DMM Report, which sets out a potential system of trade in ivory, explored in more detail below, is subject to a number of critical comments conveying concern as to the adverse consequences such a trade may have on elephant conservation, and alleging that ‘the study did not provide a series of options for decision-making mechanism for ivory trade,[and] that it may be too early to set up a mechanism given that the African Elephant Action Plan is just being implemented.’²⁹⁴

What is more, since 1994, South Africa has approached CITES twice before with the proposing trade in rhino horn products.²⁹⁵ It is apparent that the majority of parties have a cautious attitude to legalisation of trade in vulnerable species, and are more inclined towards the preservationist approach to conservation. While there is opposition to a legalised trade in rhino horn, it seems likely, that in light of the extensive measures already implemented at a domestic level, and the nature of the current poaching crisis, that CITES may entertain a proposal for trade more readily than previously. The success of the proposal will depend on how comprehensive and detailed the document is. The more research conducted, and planning prepared, the greater the possibility that the other members will be receptive to the proposal. It is conceivable that the proposal may be met with the same resistance offered against the proposed trade in elephant ivory, but the latter does offer a good example from which to

²⁹⁴ E Morgera (note 16) at 255

²⁹⁵ CoP 9 Prop 17(note 6); CoP 10 Prop 28 (note 6).

learn and improve the preparation of South Africa's proposal and responses to criticism.

2. What would such a trade look like? Conditions for Future Trade in African Elephant Ivory: The Final Report

In terms of proposing a trade regime, CITES offers little guidance as to what specific requirements should be seen to underpin such a regime.²⁹⁶ However, Milliken and Shaw suggest that many of the issues that need to be addressed can be gleaned from previous incidents of suggested wildlife trade, such as that relating to elephant ivory.²⁹⁷ These issues include the following:

[T]he identification of trading partners and stakeholders participating in the system; the structure and trading protocols to be used in both source and consuming countries; the marking or identification system to differentiate legal horn from illegal stocks; the control measures to prevent horns and products of illegal origin from leaking into legal trade channels; other law enforcement and regulatory procedures to ensure compliance with reporting and stock inventory obligations; the use of the revenues that will; be generated through trade; and the delineation of public awareness initiatives to disseminate information and foster understanding for the system.²⁹⁸

Other suggestions include the creation of a mechanism which would operate to halt trade in the event that it results in adverse consequences or there is a failure to comply with agreed regulations, and the institution of an oversight body to evaluate the proposal or audit implementation.²⁹⁹

As previously mentioned, the Report was commissioned by the CITES Secretariat following the adoption of a resolution to propose such a decision-making process at the 15th CoP.³⁰⁰ The Report is formulated in such a way as to address the issues set out in the Terms of Reference prescribed for said report, which include the following: the decision-making mechanisms and processes relating to ivory trade as they have been operating under CITES; comparative assessment of trade regimes in other high value commodities; basic principles

²⁹⁶ T Milliken & J Shaw (note 32) at 103.

²⁹⁷ Ibid.

²⁹⁸ Ibid at 103-4.

²⁹⁹ Ibid at 104.

³⁰⁰ R B Martin et al (note 13) at 1.

and factors applicable to a future trade in ivory; and an exploration of the conditions under which a legal trade could take place.³⁰¹ The proposed system for a trade in ivory is designed so as to provide 'a starting point for discussion and negotiation amongst primary and secondary stakeholders in the trade in ivory and the conservation of elephants'.³⁰² The Report explicitly provides that this system is not intended to constitute a blueprint for future trade.³⁰³

2.1. Principles behind a future trade

The conditions mentioned by Stoett above, are important elements in the Report's make-up. The Report provides that the fundamental principle behind any future trade in ivory is that 'it should contribute positively to the long-term conservation of elephants and their habitats in Africa'.³⁰⁴ Consequently, according to the Report, and as mentioned above, any trade should not be based on ivory harvested from elephants killed for that purpose.³⁰⁵ This introduces one of the primary differences between the proposed trade in rhino horn and elephant ivory: trade in rhino horn would have to allow for harvesting from the animals to supply the trade as they would not be harmed in the process and it would encourage growth in, rather than deplete, the population. However the fundamental principle referred to above remains the same in the context of both rhino horn and elephant ivory.

The Report lists a series of basic principles and factors that could be used to guide a future trade in African elephant ivory, including sustainable use principles and the African Elephant Action Plan.³⁰⁶ Related to sustainable use, the Report suggests that that the proceeds of trade should be returned to landowners so as to enable them to realise their investment in maintaining the animals on their property, and that a future trade ensures '*returns to stakeholders* (i.e. states, private and communal sector landholders) which will

³⁰¹ Ibid at 34.

³⁰² Ibid at vi.

³⁰³ Ibid.

³⁰⁴ Ibid at 18.

³⁰⁵ Ibid.

³⁰⁶ Ibid.

provide incentives to conserve and manage elephants sustainably on their land.³⁰⁷

These considerations find application in the context of a proposed trade in rhino horn in light of the concerns around the current disincentives for landholders to keep rhino horn on their land. The exorbitant costs of security against poachers, and the inherent risks involved, mean that rhinos are becoming a liability to landholders, and private landowners in particular may become less inclined to keep or protect the rhino on their property. Additional notable principles mentioned in the report include the idea that in order for trade to be sustainable in the long-run, it needs to be self-financing and thus not dependant on outside funding.³⁰⁸ Furthermore it needs to be easy to comply with so as to make it more attractive than the illegal means of acquiring the same product, or taking shortcuts.³⁰⁹

2.2. The Central Ivory Selling Organisation

The Report emphasises the importance of coordinated and secure marketing mechanisms as to reduce the steps between the producers of ivory and those who carve ivory.³¹⁰ The utility of this approach lies in that it narrows any opportunities for laundering of illegal product through legal channels, which is a key concern in legalising any trade in wildlife.³¹¹ This also assists in achieving the outcome of removing the middle-man from the supply chain. The Report proposes that this may be achieved via the establishment of a central ivory exchange in Africa.

Borrowing from the practices of the De Beers cartel in the management of the diamond trade, the Report suggests the establishment of a Central Ivory Selling Organisation (CISO).³¹² The CISO will form a single outlet

³⁰⁷ Ibid at 19-20.

³⁰⁸ Ibid at 19.

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Ibid.

³¹² Ibid at 27.

for the sales of all raw ivory coming out of Africa; it would be funded by way of a levy on ivory sales agreed to by buyers and sellers; and would operate on the basis of annual quota applications received from range states which are subsequently assessed for sustainability and consistency with the countries' management plan for elephants (also submitted to the CISO).³¹³

The organisation would operate semi-autonomously as it would remain accountable to CITES and the relevant elephant range states.³¹⁴ It is thus proposed that the CISO be structured as follows: the organisation would be headed by a CEO in control of three divisions each run by a Director; the first division relates to ivory producers, and its functions would include assessing and assisting in the applications from range states for admission as suppliers of ivory and thence making recommendations to CITES as to their admission, spot auditing of the producers ivory stocks, and attending to the logistics of moving ivory to the CISO; the second division will attend to sales of ivory, which would take place as often as suits sellers, buyers and the price-setting strategy of the CISO, and will thus also be responsible for marking and tagging, certifying and exporting ivory; finally, the third division will manage ivory processors by attending to the admission of, and liaising with, buyers as well as conducting spot audits on buyers' premises and monitoring functions.³¹⁵

The Report lists further detailed conditions that would characterise the proposed ivory-trading system in addition to the CISO. Firstly, the international trade will not authorise trade between African range states and all ivory put forward for sale would originate from government ivory stores.³¹⁶ Range states would have to satisfy a number of criteria in order to qualify for participation in the CISO, including an undertaking to return all the proceeds of ivory sales to the landholder from which the ivory originated, to supply all raw ivory directly to CISO, and comply with the exiting CITES requirements for the

³¹³ Ibid at 27-8.

³¹⁴ Ibid at 27

³¹⁵ Ibid at 30-32.

³¹⁶ Ibid at 28.

marking of ivory.³¹⁷ Buyers on the other hand would constitute any individuals or governments who own ivory carving/processing factories and who meet a series of CITES requirements.³¹⁸ The target market in the context of a trade in rhino horn would of course be different due to the alternative uses of the product, and the CITES requirements for qualification as a buyer would have to be altered accordingly. This may prove challenging, in light of the uncertainties surrounding the existing market, to identify particular characteristics buyers must satisfy. Presumably buyers of raw rhino horn could range from practitioners of traditional medicine, to pharmacies, to individuals and even carving facilities. Thus distilling requirements that all could meet (easily), and subsequently be monitored for compliance, may be more complex.

The primary goals of De Beers in the diamond trade, were to achieve the best possible returns, and to control the market.³¹⁹ Similarly the aim of CISO would be to secure the value of ivory for the producers thereof, so that this value is reinvested in the conservation of the animals and the land where it originated.³²⁰ It is for this reason that the control that would be offered CISO in manipulating the market price is of vital importance. The CISO would not over-price ivory, as this would encourage illegal trade, and thus poaching, in an effort to undermine the CISO's profits, nor would it sell ivory at artificially low prices.³²¹ The reasoning behind the latter is that flooding the market could stimulate demand.³²² This feature of the CISO thus addresses one of the primary concerns with respect to the legalisation of trade in rhino horn: that in flooding the market to lower prices, so as to disincentivise poaching, will result in an insatiable demand as a result of new consumers coming to the market who could previously not afford the product. This outcome is further cushioned against by the inclusion of a mechanism whereby the trade may be halted.

³¹⁷ Ibid at 28.

³¹⁸ Ibid at 29.

³¹⁹ Ibid at 27.

³²⁰ Ibid at 27.

³²¹ Ibid at 29

³²² Ibid at 29

It is pointed out in the Report that the system proposed for trade will require time to be implemented.³²³ The requisite stages of planning, stakeholder negotiation and consultation are outlined in the chapter on decision-making mechanisms.³²⁴ This chapter suggests the adoption of a 'multi-level decision-making process' and envisages a number of steps from the CITES agreement to allow trade, to the development of a regional conservation and management plan and the agreement between producer and processor countries to establish the CISO.³²⁵

CISO is structured so that a close link is established between supply and demand.³²⁶ The result being that there is greater transparency in the trade process, allowing stakeholders to see that a viable market has been established, which is protected from the criminal syndicates, and thereby encouraging participation in the legal trade. Furthermore the top-down and bottom-up decision-making mechanisms, involving a full range of stakeholders, ensures that the process is inclusive and stakeholders are assured that their interests are protected.³²⁷ Control is thus vested from the criminal syndicates who currently control both supply and demand.³²⁸

2.3. A Central Selling Organisation for rhino horn?

Biggs et al propose that a Central Selling Organisation (CSO) may be adapted for use in the context of legal trade in rhino horn.³²⁹ Drawing from the Report, they suggest that the CSO could be formulated much like the CISO and, through negotiation and management of the sale of horn, could encourage buyers to partake of the more cost-effective and reliable legal trade.³³⁰ The CSO would then be accountable to white rhino range states and the CITES CoP, and the proceeds gained via a levy placed on each horn sold could be used as

³²³ Ibid at 27.

³²⁴ Ibid.

³²⁵ Ibid at 23.

³²⁶ Ibid at 26.

³²⁷ Ibid.

³²⁸ Ibid.

³²⁹ D Biggs et al (note 146) at 1039.

³³⁰ Ibid.

funding. Funding could contribute towards the enforcement of the ban, ensuring returns from the sale of horns go towards landholders where the horn originated, and ensuring that rhino horn is harvested humanely and sustainably.³³¹

They also argue that a CSO could avoid or manage the potential uncertainties and risks in legal trade in the following ways: only the CSO should be allowed to sell horn to buyers, and the stockpiles of the latter should be audited regularly; South African stockpiles of horn could be used to attract buyers to the legal trade; CSO should work closely with consumer countries to ensure that strict penalties are enforced where buyers operate illegally; and a monitoring system should be developed whereby CSO can foster an understanding of the market and demand, so as to enable its adaptive management.³³²

It is evident from the above, that the decision-making mechanism and conditions for trade espoused by the Report address a number of the primary concerns that arise in the context of a legal trade in rhino horn. The proposed CSO is of primary importance in making this model for trade suitable for rhino horn, although fundamental differences in the nature of the products and the demand for each necessitate adaptations in the requirements to be met by buyers and suppliers thereof. For example, a system of trade relating to rhino horn would have to provide for the supply of harvested horn, as well as horn from dehorned rhinos and existing stockpiles. It is, however, acknowledged that this Report is intended to be a starting point and it remains to be seen whether the range of stakeholders envisaged as being involved in this decision-making process is in fact practical, and whether monitoring compliance with the legal system is possible. The proposed system is noticeably lacking in 'teeth' in respect of non-compliance with the system, presumably a contravention of the legal system would mean one is suspended or deregistered as a buyer or seller

³³¹ Ibid.

³³² Ibid.

and thus the incentive to comply would come from a desire to participate. One may question whether this is in fact sufficient, and whether the system should perhaps incorporate explicit compliance and enforcement provisions, as well as a mechanism for the withdrawal of the trade system in the event that it poaching does not cease.

CHAPTER 6 - CONCLUSION

It is apparent from the rhino poaching statistics that the current regulatory regime governing trade and preservation of this species is not able to counter the effects of a growing illegal trade involving organised criminal syndicates. The domestic measures implemented to restrict supply have simply caused prices on the illegal market to escalate, and may prove unsustainable in the long term.

As a result, the lifting of the trade ban on the commercial trade in rhino products, and thus the creation of a legal trade in competition to the illegal market, is discussed as a solution to ease the threat posed by poaching. This proposal is steeped in controversy as the opinions of proponents for trade, and those against, differ greatly as a result of the multiplicity of risks involved. Upon examination of the key opposing theories, it becomes apparent that the arguments for trade are more persuasive when considered in the current context and in light of the situation in South Africa. The utilities of the sustainable-use approach to wildlife conservation find application where a number of rhino reside on private game farms, communal land, and national parks, and these rhino are continually being lost to poachers. This approach benefits the landholder, while meeting the demand for rhino horn through legal means.

The notion of sustainable use is reflected in both case studies explored. In the context of the trade in vicuña, sustainable use is applied to the benefit of local communities. While the case of the vicuña is not directly comparable to that of rhino, it demonstrates the value of regional cooperation in species conservation and in the successful implementation of trade bans and regulations. It also provides an example of sustainable use trade that has not been detrimental to the species which had previously recovered from over-exploitation, nor has it led to noticeable growth in poaching for the illegal trade.

In the context of the African elephant, sustainable use has been applied in the form of one-off sales for the benefit of range states supporting elephant populations, to enable them to gather funds for conservation purposes. These sales have not been shown to cause a discernable increase in poaching by stimulating demand. Furthermore the insistence on maintaining ban on trade in ivory has not quelled the elephant poaching crisis which has developed and necessitated proposals for trade, which are being explored by CITES.

Having concluded that trade should be legalised, the first hurdle is to consider is whether such a proposal would be accepted by CITES so as to allow for international commercial trade. If one has regard to the previous unsuccessful attempts to submit such a proposal, and the persistent resistance to trade in African elephant ivory, it is evident how challenging such a proposal is likely to be. However, South Africa has the potential to be successful due to the fact that they have largely exhausted the alternative options, and provided that the proposal submitted addresses all the potential concerns that may arise in the context of a legalise trade.

It is then instructive to see what such a trade would look like. The Report setting out a decision-making mechanism and conditions for a future trade in African elephant ivory provides a unique opportunity to study a model of how a similar legal trade may be structured and implemented. While there are important differences between rhino horn and elephant ivory, it is interesting to note that the majority of the principles espoused by the Report, and the design of the decision-making mechanism and conditions for trade, particularly the operation of the CISO, address a number of the key arguments against a legalised trade in rhino horn. Furthermore it may prove useful in formulating the trade proposal or a similar report for the purposes of future trade in rhino horn.

In summary, this dissertation has sought to demonstrate that trade, as one of the only remaining options, should be pursued subject to strict regulation and with clearly articulated and enforced parameters implemented and

incorporated into both international law and domestic legislation. . In order for the trade ban to be lifted South Africa, and other affected range states, would have to submit a trade proposal to CITES at the next CoP, which is only set to take place in 2016. It is argued that the foundation for a legal trade in rhino horn could take 6-10 years to develop,³³³ which could mean that pursuing legalised trade might come too late to be of any value.

³³³L Boddham-Whetham (note 202).

BIBLIOGRAPHY

Primary Sources

Legislation

1. National Environmental Management Biodiversity Act 10 of 2004.
2. National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004): Biodiversity Management Plan for the Black Rhinoceros (*Diceros Bicornis*) in South Africa 2011- 2020 GN 49 in GG 36096 of 29 January 2013.
3. National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004): Convention on International Trade in Species (CITES) Regulations GNR 173 in GG 33002 of 5 March 2010.
4. National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Marketing of rhinoceros horn and hunting of white rhinoceros for trophy hunting purposes GN 756 in GG 32426 on 20 July 2009
5. National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): National moratorium on trade of individual rhinoceros horn within South Africa. GN 148 in GG 31899 of 13 February 2009.
6. National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Norms and Standards for the marking of rhinoceros and rhinoceros horn, and for the hunting of rhinoceros for trophy hunting purposes GN 304 in GG 35248 of 10 April 2012.
7. National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Threatened or Protected Species Regulations, 2007 GNR 152 in GG 29657 of 23 February 2007.

Cases

8. *Chumlong v S* (A82/2013) [2013] ZAGPTHC 294 (30 August 2013).

Secondary Sources

Journal Articles

9. Biggs, Franck Courchamp, R Martin and H P Possingham 'Legal Trade of Africa's Rhino Horns' 1 March 2013 *Science* Vol 339 No 6123 pp1038-1039, available at <http://www.sciencemag.org/content/339/6123/1038>.

10. L Boddham-Whetham 'To Legalise or not to legalise?' available at http://www.savetherhino.org/rhino_info/thorny_issues/legalising_the_horn_trade/to_legalise_or_not_to_legalise, accessed on 5 May 2013.
11. EH Bulte et al 'The effects of one-off ivory sales on elephant mortality' 2007 71(2) *Journal of Wildlife Management* 613.
12. J E Carey 'Improving the efficacy of CITES by providing the proper incentives to protect endangered species' 1999 77 *Wash. U. L. Q.* 1291.
13. A Collins, G Fraser and J Snowball 'Could a regulated market approach for rhinoceros horns work in South Africa? Some practical issues and concerns' 2013, available at http://www.essa2013.org.za/fullpaper/essa2013_2708.pdf accessed on 3 December 2013.
14. B Child 'The Sustainable use approach could save South Africa's rhinos' 2012 *S Afr J Sci* 108(7/8), available at <http://www.sajs.co.za/sustainable-use-approach-could-save-south-africa%E2%80%99s-rhinos/child-brian>, accessed on 10 November 2013.
15. C Cunningham and J Berger 1994 The de-horning dilemma *Wildlife Conservation* 97 (1), 15.
16. S B Edwards III 'Legal trade in African Elephant Ivory: Buy Ivory to Save the Elephant?' 2001 7 *Animal L.* 119.
17. K Ellis 'Tackling the demand for Rhino Horn' 2013 *The Horn* 23, available at www.savetherhino.org, accessed on 27 November 2013.
18. R Emslie & M Brooks *African Rhino Status Survey and Conservation Action Plan* (1999) IUCN/SSC African Rhino Specialist Group IUCN, Gland, Switzerland and Cambridge, UK. ix + 92.
19. S M Ferreira, J M Botha and M C Emmett 'Anthropogenic influences on conservation values of white rhinoceros' 2012 *PLOS ONE* 7 (9), e45989 at 7, available at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0045989>, accessed on 3 January 2014.
20. S M Ferreira & B Okita-Ouma 'A proposed framework for short-, medium- and long-term responses by range states to curb poaching for African rhino horns' 2012 *Pachyderm* No. 51 January—June 52.
21. M Glennon 'Has International Law Failed the Elephant?' 1990 84 *Amer. J. Int'l L* 1 at 25-6.

22. A J Heimert 'How the elephant lost his tusks' 1995-6 104 *Yale L.J.* 1473.
23. M H Knight 'African Rhino Specialist Group report 10th Meeting of the IUCN/SSC African Rhino Specialist Group' 2011 *Pachyderm*, 49.
24. AM Lemieux and RV Clarke 'The international ban on ivory sales and its effects on elephant poaching in Africa' 2009 49 *Brit. J. Criminol.* 451.
25. G Lichtenstein 'Vicuna conservation and poverty alleviation? Andean communities and international fibre markets' 1 February 2010 4 *International Journal of the Commons* 100.
26. G Lichtenstein et al *Vicugna vicugna* 2008 IUCN 2013, IUCN Red List of Threatened Species, Version 2013.2., available at www.iucnredlist.org, accessed on 10 February 2014.
27. PA Lindsey and A Taylor 'A study of the dehorning of African rhinoceroses as a tool to reduce the risk of poaching' 2011. Report prepared by the Endangered Wildlife Trust (EWT) for the South African Department of Environmental Affairs (DEA), available at https://www.environment.gov.za/sites/default/files/docs/studyon_dehornin_g_african_rhinoceros.pdf, accessed on 5 February 2014.
28. R Martin 'A legal Trade in Rhino Horn: Hobson's Choice' 2012 Rhino Survival Trust, Johannesburg, South Africa, available at <http://www.rhinoresourcecenter.com/index.php?s=1&act=pdfviewer&id=1331766338&folder=133>, accessed on 5 January 2014.
29. RRJ McAllister 'Legalising markets and consequences for poaching of wildlife: Vicuña as a case study' 2009 90 *Journal for Environmental Management* 120.
30. Rhinonomics® Presentation on the dynamics of the market for rhino horn and the implications of different policy choices, presented CITES meeting in Thailand 2013 Rhinonomics (C) 2013, blueprint@blueprintgroup.co.za, available at <http://rhino-dialogues.co.za/wp-content/uploads/2012/11/CITES-RHINONOMICS-R-Presentation-MARCH-2013-THAILAND.pdf>, accessed on 5 February 2014.
31. E Morgera 'CITES/SC-62: Tackling the Elephant Crisis' (2012) 45 4-5 *Environmental Policy and Law* 254.

32. S Patal 'Convention on International Trade in Endangered Species: Enforcement and the last unicorn' 1995-6 16 *Hous. J. Int'l L.* 157.
33. M P Scholtz 'The survival of the rhino in South Africa, for South Africa—a critical approach' 2012 Krugersdorp, *The Living Ghoen*, available at http://www.rhinosourcecenter.com/index.php?s=1&act=refs&CODE=ref_detail&id=1346722541, accessed on 10 November 2013.
34. D Stiles 'CITES—Approved Ivory Sales and Elephant Poaching' July 2008-June 2009 45 *Pachyderm* 150, available at <http://www.pachydermjournals.org/index.php/pachy/article/viewArticle/14>, accessed on 2 January 2014.
35. D Stiles 'The ivory trade and elephant conservation; 2004 31(4) *Environmental Conservation* 309.
36. P Stoett 'To Trade or Not to Trade—The African Elephant and CITES' 1996-7 52 *Int'l* 567, available at <http://heiononline.org>, accessed on 31 December 2013.
37. M 't Sas Rolfes 'Elephants, Rhinos and the Economics of the Illegal Trade' 1997 *Pachyderm* 26.
38. M 't Sas Rolfes 'The Rhino Poaching Crisis: a Market Analysis' 2012 available at www.rhino-economics.com, accessed on 12 November 2013.
39. J Vandergrift 'Elephant Poaching: CITES failure to combat the growth in Chinese demand for ivory' 2013 31 *Va. Env'tl. L.J.* 102.

News and internet articles

40. T Carnie 'Rhino horn poison extremely toxic' available at <http://www.iol.co.za/scitech/science/environment/rhino-horn-poison-extremely-toxic-1.1575937#.UwCxj2KSzwg> accessed on 8 January 2014.
41. H Dagut 'Poisoning rhino horn - ethically defensible, but legally questionable?' available at <http://www.bizcommunity.com/Article/196/622/102600.html> accessed on 8 January 2014.
42. T Jacobson 'Rhino and Vicuna: A Parallel' 2012 Unpublished, available at http://www.rhinosourcecenter.com/pdf_files/133/1331765741.pdf; accessed on 10 February 2014.
43. 'MoU signed with China on combating rhino poaching' (2 April 2013) *Legalbrief Today*.

44. J Rademeyer 'SA pushes for legal trade in rhino horn' *Mail & Guardian*, 22 March 2013.
45. Save the Rhino 'Mozambique's role in the poaching crisis' available at http://www.savetherhino.org/rhino_info/thorny_issues/mozambiques_role_in_the_poaching_crisis, accessed on 12 December 2013.
46. K Sharife 'Is it time to legalise rhino horn trade?' available at <http://mondediplo.com/openpage/is-it-time-to-legalise-rhino-horn-trade>, accessed on 13 November 2013.
47. E Thorson and C Wold 'Back to Basics: An analysis of the object and purpose of CITES and blueprint for implementation 2010 International Environmental Law Project', available at <http://www.lclark.edu/live/files/4620>, accessed on 2 February 2014.

Conventions and associated documents

48. J Blanc et al *Status of African elephant populations and levels of illegal killing and the illegal trade in ivory: A report to the African Elephant Summit December 201,3* prepared by the CITES Secretariat, IUCN/SSC African Elephant Specialist Group and TRAFFIC International at 4, available at https://cmsdata.iucn.org/downloads/african_elephant_summit_background_document_2013_en.pdf, accessed on 20 January 2014.
49. CITES (2010) Conservation of and trade in African and Asian rhinoceroses. Resolution Conf. 9.15 (Rev.CoP15) available at <http://www.cites.org/eng/res/09/09-14R15.php>, accessed on 20 November 2013.
50. CITES (2013) Rhinoceroses (Rhinocerotidae spp.) Resolution Conf. 16.84 – 16.92 (Rev. CoP16) available at http://www.cites.org/eng/dec/valid16/16_84-92.php, accessed on 20 November 2013.
51. CITES 'What is CITES?' available at <http://www.cites.org/eng/disc/what.php>, accessed on 17 January 2014.
52. The Convention on International Trade in Endangered Species in Fauna and Flora, Mar. 3, 1973, 27 UST 1087; TIAS 8249; 993 UNTS 243 (hereinafter CITES).

53. CITES CoP16 Prop.10 available at <http://www.cites.org/sites/default/files/eng/cop/16/prop/E-CoP16-Prop-10.pdf> accessed on 10 January 2014.
54. CoP9 Prop 17 Amendments to Appendices I and II of the Convention (1994).
55. CoP10 Prop 28 Consideration of Proposals for the Amendment of Appendices I and II (1997).
56. CITES, Criteria for Amendment of Appendices I and II, Res. Conf. 9.24 (Rev. CoP14) (1994).
57. CITES CoP10 Decisions 10.1 and 10.2, available at <http://www.cites.org/sites/default/files/eng/cop/10/E10-Decisions.pdf>, accessed on 7 February 2014.
58. CoP16 Doc 54.1 (Rev.1) Interpretation and Implementation of the Convention—Species Trade and Conservation: Rhinoceroses.
59. International Institute for Sustainable Development ‘*Earth Negotiations Bulletin*’ available at <http://www.iisd.ca/cites/cop16/> accessed on 8 February 2014.
60. R B Martin, D H M Cumming, G C Craig, SC Gibson, D A Peake *Decision Making Mechanism and Necessary Conditions for Future Trade in African Elephant Ivory*, (SC-62 Doc. 46.4 Annex, CITES, Geneva, 2012).
61. R Emslie (2012) *Ceratotherium simum* In: IUCN Red List of Threatened Species. Version 2012.2 <www.iucnredlist.org>, accessed on 1 December 2013.
62. R Emslie (2012) *Ceratotherium simum*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. available at www.iucnredlist.org, accessed on 2 January 2014.
63. T Milliken R H Emslie & B Talukdar (2009) *African and Asian Rhinoceroses – Status, Conservation and Trade: A report from the IUCN Species Survival Commission (IUCN/SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP14) and Decision 14.89.Doc CoP15 45.1. Annex*, CITES Secretariat, Geneva, Switzerland, pp.19, available at <http://www.cites.org/common/cop/15/doc/E15-45-01A.pdf>, accessed on 11 December 2013.

64. T Milliken R H Emslie & B Talukdar (2012) *African and Asian Rhinoceroses – Status, Conservation and Trade: A report from the IUCN Species Survival Commission (IUCN/SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP15) CoP16 Doc 54.2. Annex 2, CITES Secretariat, Geneva, Switzerland, available at <http://www.cites.org/eng/cop/16/doc/E-CoP16-52-02.pdf> accessed on 11 December 2013.*
65. T Milliken & J Shaw 'The South Africa - Viet Nam Trade Nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates' (2012) TRAFFIC, Johannesburg, South Africa.
66. TRAFFIC's engagement on African rhinoceros conservation and the global trade in rhinoceros horn available at <http://www.traffic.org/rhinos/>, accessed on 3 December 2013.
67. WWF Factsheet 13th Meeting of the Conference of the Parties to CITES, Bangkok, 2-14 October 2004: Black Rhinoceros *Diceros bicornis* available at www.panda.org/downloads/ecop13blackrhinofactsheet.pdf, accessed on 25 January 2013.

Books

68. U Beyerlin and T Marauhn *International Environmental Law* 2011 Hart Publishing Ltd, Oxford, UK.
69. PW Birnie and AE Boyle *International Law and the Environment* Second Edition 2002 Oxford University Press, Oxford, UK.
70. J Glazewski *Environmental Law in South Africa Second Edition* (2005) Lexis Nexis, Durban, South Africa.
71. D Hunter et al *International Environmental Law and Policy Fourth Edition* 2011 Thomson Reuters/Foundation Press, New York, USA.
72. A Kiss and D Shelton *International Environmental Law* 3rd Ed (2004) United National Environment Programme, Transnational Publishers, Inc., Ardsley, NY, USA.
73. S Lyster *International Wildlife Law* (1985) Grotius Publications, Cambridge, UK.

74. N G Mankiw & M P Taylor *Microeconomics* (2006) Thomson Learning, London, UK at 74.
75. P Sands et al *Principles of International Environmental law* (2012) Cambridge University Press, UK at 472.
76. Walker, C & Walker, A *The Rhino Keepers* 2012 Jacana Media, Auckland Park: South Africa
77. M Van der Linde & L Feris (eds) *Compendium of Environmental Legislation* (2010) Pretoria University Law Press, Pretoria, South Africa.

Official Publications

78. The Department of Environmental Affairs 'Forensics to support the fight against Wildlife Crime' (6 November 2013) available at https://www.environment.gov.za/mediarelease/forensicssupport_wildlifecrime, accessed on 5 February 2014.
79. Department of Environmental Affairs 'Minister Edna Molewa's speech at the Portfolio Committee on Water and Environmental Affairs Stakeholder Workshop on rhino poaching' available https://www.environment.gov.za/speech/molewa_portfoliocommittee_stakeholderworkshop, accessed on 6 January 2014.
80. Department of Environmental Affairs 'National Environmental Compliance and Enforcement (NECER) 2012 / 2013 report' at 57-64 available at https://www.environment.gov.za/sites/default/files/docs/necer_report2012_13.pdf, accessed on 6 January 2014.01.30
81. Department of Environmental Affairs 'National Strategy for the Safety and Security of Rhinoceros Populations in South Africa (2010)' available at <http://www.rhinoresourcecenter.com/index.php?s=1&act=pdfviewer&id=1301008151&folder=130>, accessed on 3 December 2013.
82. Department of Environmental Affairs 'Return of rhino horns and elephant ivory products from Hong Kong' available at https://www.environment.gov.za/mediarelease/rhinohorns_elephantivory_hongkong, accessed on 03 December 2013.
83. Department of Environmental Affairs 'Rhino Issue Management Report 2013' available at https://www.environment.gov.za/sites/default/files/docs/rhinoissue_managementreport.pdf, accessed on 21 November 2013.

84. Department of Environmental Affairs' Rhino poaching interventions and the position of South Africa to the 16th Conference of Parties of the Convention in International Trade in Endangered Species of Fauna And Flora (Cites)' available at
https://www.environment.gov.za/content/rhinopoaching_interventionsandpositionofsa_16copofthecites accessed on 17 June
https://www.environment.gov.za/content/rhinopoaching_interventionsandpositionofsa_16copofthecites accessed on 17 June 2013.
85. Department of Environmental Affairs 'South Africa participates in CITES CoP16' available at
https://www.environment.gov.za/content/southafrica_citescop16, accessed on 16 June 2013.
86. Department of Environmental Affairs 'Update on rhino poaching statistics (17 January 2014 update)' available at
https://www.environment.gov.za/mediarelease/rhinopoaching_statistics_17jan2014, accessed on 2 February 2014.
87. S Milledge 'Challenges and recommended actions to address rhino horn trade involving the Republic of South Africa' (2007) confidential TRAFFIC memo to DEAT, South Africa.
88. Minister of Water and Environmental Affairs Gazettes the Biodiversity Management Plan for Black Rhino for Implementation 2013 available at
https://www.environment.gov.za/content/minister_gazettes_biodiversitymanagementplan_blackrhino, accessed on 20 September 2013.
89. Emslie, R. 2012. *Diceros bicornis*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. Available at www.iucnredlist.org. Downloaded on 11 January 2014
90. Emslie, R. 2012. *Ceratotherium simum*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2 available at www.iucnredlist.org downloaded on 11 January 2014