

International wildlife law and the rhinoceros

A legal assessment

LLM International and European Law

Master Thesis

Student: B.M.M Janssens

ANR: 958933

Supervisor: mr. dr. A. Trouwborst

Tilburg University Law School

Academic Year: 2015-2016

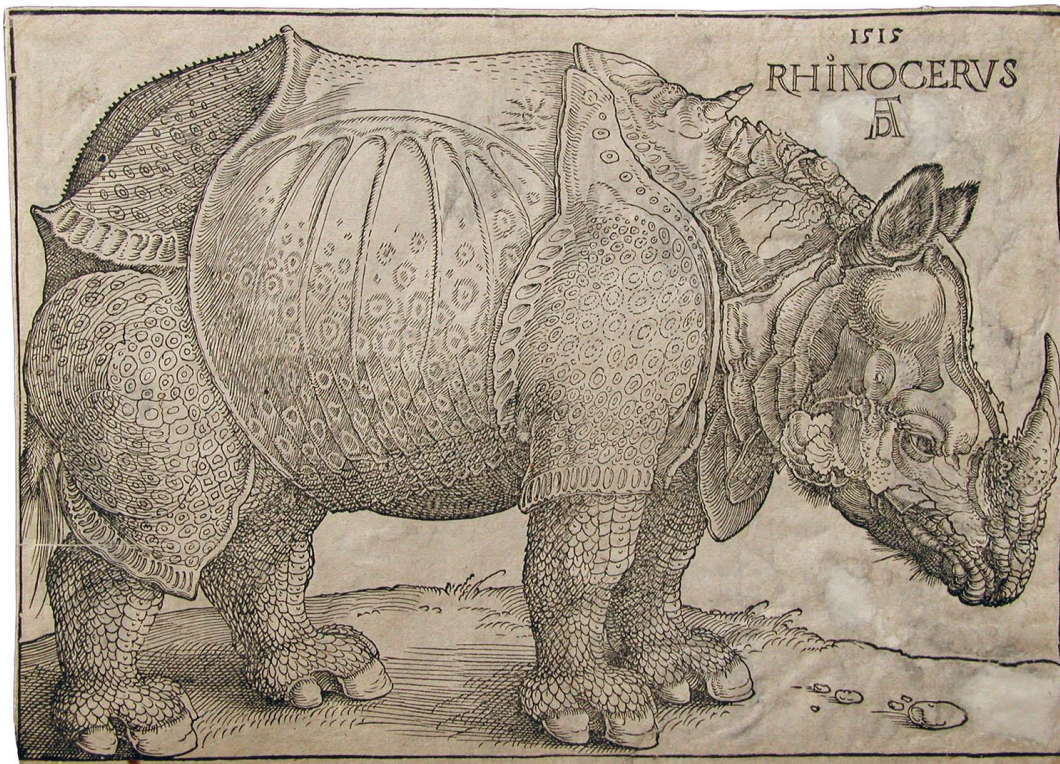


Table of contents

Table of contents	2
1. Introduction	4
2. Rhinoceros species.....	6
2.1 White rhinoceros (<i>Ceratotherium simum</i>).....	6
2.2 Black rhinoceros (<i>Diceros bicornis</i>)	7
2.3 Indian rhinoceros (<i>Rhinoceros unicornis</i>).....	8
2.4 Javan rhinoceros (<i>Rhinoceros sondaicus</i>)	9
2.5 Sumatran rhinoceros (<i>Dicerorhinus sumatrensis</i>).....	10
3. The Convention on International Trade in Endangered Species of Wild Fauna and Flora: CITES	11
3.1 CITES.....	11
3.2 The system of CITES	13
3.3 CITES and rhinoceroses.....	15
3.4 CITES' rhino policy.....	17
3.5 Decisions regarding rhinoceroses at the 16 th Meeting.....	18
3.6 Export quotas for black rhinoceros hunting trophies	21
3.7 CITES on the use of traditional medicines	22
3.8 CITES: an assessment from the rhino perspective.....	23
4. The Ramsar Convention.....	27
4.1 Ramsar	27
4.2 The System.....	28
4.3 Ramsar and rhinoceroses.....	31
4.4 Ramsar: an assessment from the rhino perspective	33
5. The World Heritage Convention	35
5.1 Convention Concerning the Protection of the World Cultural and Natural Heritage	35
5.2 The System.....	36
5.3 The World Heritage Convention and the rhinoceros.....	40
5.4 The World Heritage Convention: an assessment from the rhino perspective	42
6. The Bonn Convention on Migratory Species	45
6.1 The Bonn Convention.....	45
6.2 Bonn and rhinoceroses	50

6.3 The Bonn Convention: an assessment from the rhino perspective.....	52
7. The Convention on Biological Diversity	53
7.1 The Convention on Biological Diversity	53
7.2 CBD and rhinoceroses	57
7.3 The Convention on Biological Diversity: An assessment from the rhino perspective	58
8. Conclusion.....	59
Bibliography	63
List of legal instruments.....	67

Cover image source: “Janssen’s chiaroscuro woodcut”, Dürer’s rhinoceros,
< https://en.wikipedia.org/wiki/D%C3%BCrers_Rhinoceros >.

1. Introduction

The goal of this study is to map out the international legal framework currently in existence with regard to the conservation and protection of the rhinoceros. Although the main character of this research will be explorative, enhancements to potential lacunae and deficiencies, if any encountered, within this legal framework will also be brought forth. To achieve this goal standard international law research methodology will be used, which involves the identification and analysis of relevant treaties and their interpretation according to the 1969 Vienna Convention on the Law of Treaties. The species of rhinoceros that will be considered in this study are all five rhino species, which are the two African species, the white (*Ceratotherium simum*) and the black rhinoceros (*Diceros bicornis*) and the three Asian species, the Javan (*Rhinoceros sondaicus*), the Sumatran (*Dicerorhinus sumatrensis*) and the Indian rhinoceros (*Rhinoceros unicornis*). Further division into subspecies is possible but in the international legal framework not a relevant division and therefore not applied.

The focus of this study will be on multilateral international treaties and will not include regional treaties, bilateral treaties and domestic legislation. Although these areas of law also contribute greatly to the conservation of rhinoceroses it goes beyond the scope of this study to address them here. The functioning and legal regimes, of five major international multilateral conservation treaties will be dealt with. Those treaties being the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹, the 1971 Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)², the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)³, the 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS)⁴ and the 1992 Convention on Biological Diversity (CBD)⁵. These treaties are each quite different in subject and form but can all contribute to rhinoceros conservation in their own way. CITES for instance deals with rhinoceroses in a direct and specific manner due to its system of Appendices listing individual species, whereas the Ramsar Convention works with a list of protected wetlands, wetlands that in some cases are inhabited by rhinoceroses thereby protecting the species indirectly. As Table 1 shows, most major rhino range states, such as South Africa, Namibia and India, are a party to the treaties considered and other range states also show a high level of subscription to the considered instruments. International treaties are binding upon the states that become a party to them, according to the Vienna Convention⁶. Although non-binding, most decisions and recommendations made by treaty bodies, like a Conference of the

¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973; entered into force 1 July 1975) 993 UNTS 243 (CITES).

² Convention on Wetlands of International Importance Especially as Waterfowl Habitat (adopted 2 February 1971; entered into force 21 December 1975) 996 UNTS 245 (Ramsar Convention).

³ Convention Concerning the Protection of the World Cultural and Natural Heritage (adopted 16 November 1972; entered into force 17 December 1975) 1037 UNTS 151 (World Heritage Convention).

⁴ Convention on the Conservation of Migratory Species of Wild Animals (adopted 23 June 1979; entered into force 1 November 1983) 1651 UNTS 333 (Bonn Convention).

⁵ Convention on Biological Diversity (adopted 5 June 1992; entered into force 29 December 1993) 1760 UNTS 79 (CBD)

⁶ Vienna Convention on the Law of Treaties (adopted 23 May 1969; entered into force 27 January 1980) 1155 UNTS 333 (Vienna Convention), Article 26.

Parties, should be taken seriously as well, offering authoritative guidance in treaty interpretation. If a state respects the international legal order and its principles, such as *'pacta sunt servanda'*⁷, it should take treaty obligations and its interpretations seriously. Unfortunately, especially in environmental law, this is not always the case, despite what Henkin claimed in 1979⁸, that “it is probably the case that almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time”. Environmental law is not the area of international law with the highest level of compliance. Nevertheless, it can contribute to conservation in a big way, keeping it on governments’ agenda’s⁹, influencing domestic law, providing transboundary protection and making it easier for NGO’s to confront governments with their obligations.

Rhino range state	CITES	CBD	Ramsar Convention	World Heritage Convention	CMS
Angola	X	X	-	X	X
Botswana	X	X	X	X	-
DRC Congo	X	X	X	X	X
India	X	X	X	X	X
Indonesia	X	X	X	X	-
Kenya	X	X	X	X	X
Malawi	X	X	X	X	-
Malaysia	X	X	X	X	-
Mozambique	X	X	X	X	X
Myanmar	X	X	X	X	-
Namibia	X	X	X	X	-
Nepal	X	X	X	X	-
South Africa	X	X	X	X	X
South Sudan	-	X	X	-	-
Sudan	X	X	X	X	-
Swaziland	X	X	X	X	X
UR of Tanzania	X	X	X	X	X
Uganda	X	X	X	X	X
Zambia	X	X	X	X	-
Zimbabwe	X	X	X	X	X

Table 1: Rhino range state treaty ratification. Range states based on data from the IUCN Red List.

⁷ *Ibid.*

⁸ L. Henkin, *How Nations Behave: Law and Foreign Policy*, (2nd ed. Columbia University Press, New York 1979), 47.

⁹ A. Trouwborst, ‘Global large carnivore conservation and international law’, in: 24 *Biodiversity and Conservation*, no. 7, 2015, pp. 1567-1588.

2. Rhinoceros species

2.1 White rhinoceros (*Ceratotherium simum*)

The white or square-lipped rhinoceros is the largest of the five species of rhinoceros. It can be distinguished from its black counterpart by the square shape of its lips. Where the black rhinoceros has a pointy lip, the white rhinoceros has wider or squarer lips. The white in its name also does not so much refer to its color as it does to its lips. In Afrikaans the word 'wide' is 'wyd', which in turn is derived from the Dutch word 'wijd'. In English this 'wyd' was misinterpreted for 'white' and so the name was born.

The white and the black rhino actually do not differ much in color, since both are grey.

The white rhino can weigh up to 2,700 kilograms, reach up to 1.8 meters in height and 5 meters in length and lives in savannah type territories. This large herbivore feeds solely on grass¹⁰. It lives a mainly sedentary lifestyle only migrating within its own territory. The size of the territory differs between males and females, with that of the males usually being as small as 2 square kilometers and that of the females reaching 10-12 square kilometers, spanning several male territories¹¹.

It is found across the African continent and can be divided into two subspecies, the northern white rhino (*Ceratotherium simum simum*) and the southern white rhino (*Ceratotherium simum cottoni*). Discussion exists to whether or not the northern subspecies should be considered as a separate species¹² but a definitive verdict has yet to be delivered. For the purpose of this study the white rhinoceros will be considered as one species consisting of two subspecies.

The original range of the southern white rhinoceros spanned across the whole southern part of the African continent, from Mozambique to Namibia and from Zambia down to South Africa. Its northern kin concentrated in the central and northern part of Africa in the current states of Uganda, Kenya, Democratic Republic of the Congo, Sudan, South Sudan, Chad and even a small part of Cameroon¹³. Currently however the northern white rhinoceros has nearly gone extinct in the wild and is labelled as Critically Endangered by the IUCN¹⁴. Only three individuals who belong to a Czech zoo and live in a conservancy in Kenya remain. The population that used to exist in Garamba National Park in the Democratic Republic of the Congo has been deemed extinct due to a lack of sightings or rhino traces since 2006. There have been sightings in some desolate parts of Southern Sudan but this remains mere speculation without any conclusive evidence¹⁵.

The southern white rhinoceros remains the most populous of the five rhino species, totaling 20,165 individuals in 2010, with its largest populations spread over the states of South Africa, Namibia, Kenya,

¹⁰ R. Norman Owen-Smith, 'The Social Ethology of the White Rhinoceros', in: 38 *Zeitschrift für Tierpsychologie*, no. 4, 1975, pp 337-384.

¹¹ R. Norman Owen-Smith, 'Territoriality in the White Rhinoceros', in: 231 *Nature*, no. 5301, 1971, pp 294-296.

¹² C.P. Groves, P. Fernando, J. Robovský, 'The Sixth Rhino: A Taxonomic Re-Assessment of the Critically Endangered Northern White Rhinoceros', in: 5 *PLoS ONE*, no. 4, 2010.

¹³ C.P. Groves, 'Ceratotherium simum', in: 8 *Mammalian Species*, 1972, pp 1-6.

¹⁴ R. Emslie, *Ceratotherium simum*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/4185/0>, accessed 23 March 2016.

¹⁵ *Ibid.*

Zimbabwe and smaller populations confined to Botswana, Mozambique, Swaziland and Zambia¹⁶. The species as a whole is considered to have a Near Threatened status by the IUCN instead of one of Least Concern. This is because despite the relatively large number of white rhinos currently living in the wild, the threat of poaching has seriously increased over the last couple of years and so has the demand for rhino horn. The prevention of these threats becoming a devastating problem for the number of rhinos has come at a cost and state expenditure in this field has been high. If these budgets were to shrink, the damage of poaching would probably increase significantly and population levels would drop to a IUCN Vulnerable status quite rapidly.¹⁷

2.2 Black rhinoceros (*Diceros bicornis*)

The black rhinoceros is one of two African rhino species. It is generally smaller than its white relative, but sizes can differ greatly among individuals and subspecies. The black rhino is a so-called browser¹⁸, in contrast to the grazing white rhinoceros, which means that it feeds on different shrubs, small trees and herbaceous plants and not on grasses¹⁹. Its pointy prehensile lip gives him the right tool to do so. The species can be found in a wide variety of habitats, including bush, savannah, deserts and forests²⁰, actually wherever there is an abundance of nutrition. The size of a black rhinos territory is comparable to that of the white rhino. A male's home range is usually around 4 or 5 square kilometers and that of the female about 6 to 8 square kilometers. Both male and female live a mainly solitary and sedentary life. At the moment four subspecies within the greater black rhinoceros species are recognized of which one has gone extinct. These subspecies roughly correspond with their different ranges of distribution.

Dicornis bicornis longipes (West African Black rhino) originally occurred in the central-western part of Africa in Cameroon and Chad but is now considered extinct. *Dicornis bicornis bicornis* (South-western Black rhino) is found in South Africa and Namibia, with sightings or alleged occurrences in Angola and Botswana. *Dicornis bicornis michaeli* (East African Black rhino) is currently confined to Tanzania and mainly Kenya but its original range also included Sudan, Ethiopia and Somalia. *Dicornis bicornis minor* (South Central Black rhino) is the most common subspecies of Black Rhino and is most numerous in South Africa and Zimbabwe. Botswana, Tanzania, Swaziland, Zambia and Malawi also host small populations.

Historically the black rhino's range included vast stretches of the southern and eastern part of the African continent and even consisted of upper central and western Africa. Estimates of black rhino numbers at the turn of the century lay in the hundred thousand but plummeted to a mere 2,410 in 1995 mainly due to poaching. How sudden of a decline this was is shown by the fact that population numbers declined by an estimated 97,6% since 1960. Conservation efforts brought this number up to the current total number of about 4,880 as of December 2010²¹. However poaching has again increased dramatically since then, which will probably result in a decline in the number of rhinos over the coming years. The

¹⁶ Milliken, T., Emslie, R. H., & Talukdar, B. (2009, November). African and Asian rhinoceroses—status, conservation and trade. In *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 (Vol. 9)*.

¹⁷ Emslie, *supra* n. 14.

¹⁸ A.T.A. Ritchie, 'The Black Rhinoceros (*Diceros Bicornis L.*)', in: *1 African Journal of Ecology*, no. 1. 1963, pp. 54-62.

¹⁹ C.P. Groves, A.K. Kes Hillman-Smith, 'Diceros bicornis', in: *455 Mammalian Species*, 1994, pp. 1-8.

²⁰ Ritchie, *supra* n. 18.

²¹ Emslie, *supra* n. 14.

IUCN labelled the species as Endangered in 1986 and as Critically Endangered in 1996, and it remains to have this status today.

2.3 Indian rhinoceros (*Rhinoceros unicornis*)

The Indian or greater one-horned rhinoceros is one of the three Asian rhino species. It is the biggest of those three species and also the most numerous. It is a large and heavy mammal with females weighing between the 1500 and 1600 kilograms on average and males between 2000 and 2100 kilograms. Its body length is generally about 4 meters from head to tail and its height ranges from 1.4 to 1.7 meters in females and 1.6 to 1.9 meters in males²². It is easily distinguishable from its African relatives by its single horn and armor-like physique. Its color is, similar to the other species, a greyish brown. The habitat of the Indian rhinoceros is that of riverine grasslands, alluvial plains, general swampy areas and riverine woodland. There it feeds on different plants, fruits, leaves and branches. With the exception of the cows and calves and the temporary concentrations of several rhinoceroses around feeding grounds, their lifestyle is mainly solitary. Displays of territoriality are rare due to the fact that actual determined territories are absent. The constantly changing conditions within the riverine habitat and correspondingly changings whereabouts of food sources and females prohibit that. Ranges of males overlap, with stronger and weaker males both being present there. The species' historical distribution area stretched all along the southern slopes of the Himalayas, the river banks of the Brahmaputra, Ganges and Indus river, spanning the current states of India, Nepal, Bhutan, Pakistan, Bangladesh and even Burma²³.

Its preference for the specific swamp type habitat is one of the reasons this distribution has been seriously diminished over the last two centuries. As human population increased, much of the land inhabited by rhinos was cultivated, leading to human-rhino conflicts with humans being the clear victors. This problem combined with the threat of poaching made the decline in numbers so serious that it nearly led to extinction in the early 1900s in India and in Nepal in the 1960s²⁴. Intensive conservation efforts by both states have led to a current population of 3,264 individuals as of June 2012, the bulk thereof living in India (2,730)²⁵.

These remaining rhinos are restricted to a number of relatively small national parks and reserves in Nepal and India, the ones containing the most individuals are Kaziranga National Park in India and Royal Chitwan National Park in Nepal. Apart from poaching and habitat loss this is also one of the threats facing current populations, the fact that the populations are so concentrated. A single dramatic event like the outbreak of a disease, a natural disaster or the outbreak of civil unrest could severely damage such a population and thereby the species as a whole. This, in combination with poaching and habitat loss, are the reasons IUCN has labelled the species as Endangered and has done so since 1986.

²² W.A. Laurie, E.M.Lang, C.P. Groves, 'Rhinoceros unicornis', in: 211 *Mammalian Species*, 1983, pp. 1-6.

²³ T.J. Foose, N. Van Strien, *Asian rhinos: status survey and conservation action plan*. Vol. 32. IUCN, 1997.

²⁴ *Ibid.*

²⁵ B.K. Talukdar, R. Emslie, R. Bist, S.S. Choudhury, S. Ellis, B.S. Bonal, M.C. Malakar, B.N. Talukdar, M. Barua, *Rhinoceros unicornis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/19496/0> , accessed 15 June 2016.

2.4 Javan rhinoceros (*Rhinoceros sondaicus*)

Also known as the lesser one-horned rhinoceros, the Javan rhinoceros is the smaller brother of the Indian rhinoceros. Because populations are small and remote, behavioral studies proved difficult and thus remain scarce²⁶. A few general observations about the animal can be made however. As a herbivore, it browses for leaves, twigs and shoots of woody plant species. Males are generally smaller than females, with the females weighing around 1500 kilograms and the males 1200 kilograms. The animal bears a greyish color and is usually found in lowland forests and fertile floodplains. This habitat preference of the animal is based on the small population that remains. Throughout the century various comments have been made about its preferred habitat and given its greater historical range a wide variety of suitable habitats is likely. As all other rhinos it lives a solitary life with the mother and calf as an exception. Its single horn of about 20 centimeters is common on males but rarely seen on females. This large mammal was once frequent in many countries throughout Asia. The species consisted of 3 subspecies which were spread over what is now India, Bangladesh, China, Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaysia and the islands of Sumatra and Java in Indonesia²⁷. Unfortunately those days are long gone. Of the three recognized subspecies, *Rhinoceros sondaicus inermis*, *Rhinoceros sondaicus annamiticus* and *Rhinoceros sondaicus sondaicus* only the latter one remains in existence. Incessant poaching throughout the 18th and 19th century combined with serious habitat loss have provided for the demise of the other two subspecies.

Rhinoceros sondaicus inermis used to exist in the Bay of Bengal in a wetland area known as the Sundarbans. A wetland area not so far from Calcutta, India of which large stretches are currently part of a national park established in 1984. For the rhino this establishment proved to be too little too late because it had probably already gone extinct at the beginning of the 20th century due to poaching and significant reductions in living space²⁸. *Rhinoceros sondaicus annamiticus* held on for quite a while longer and up until 2010 a very small population of about 7 individual rhinos remained alive in Cat Tien National Park in Vietnam²⁹. The chances of survival of this small population were little however and not surprisingly the last surviving member of the subspecies was shot in 2010 by a poacher³⁰. The only subspecies remaining is the *Rhinoceros sondaicus sondaicus* but prospects are grim for these survivors as well. Only one remnant population exists in the most western part of Java, in Ujung Kulon National Park, consisting of a mere 35 individuals³¹ based on monitoring in 2013³². With the population being so limited it is of course extremely vulnerable. Next to the usual threats of habitat loss and poaching, other threats such as disease, volcanic activity of the nearby Krakatoa and tsunami's could be

²⁶ C.P. Groves, D.M. Leslie, 'Rhinoceros sondaicus (Perissodactyla: Rhinocerotidae)', in: 43 *Mammalian Species*, no. 887, 2011, pp 190-208.

²⁷ G. Polet, T. Van Mui, N. Xuan Dang, B. Huu Manh, M. Baltzer, 'The Javan Rhinos, *Rhinoceros sondaicus annamiticus*, of Cat Tien National Park, Vietnam: Current Status and Management Implications', in: 27 *Pachyderm*, 1999, pp. 34-48.

²⁸ K. Rookmaaker, 'Records of the Sundarbans Rhinoceros (*Rhinoceros sondaicus inermis*) in India and Bangladesh', in: 24 *Pachyderm*, 1997, pp. 37-45.

²⁹ Polet, *supra* n. 27.

³⁰ M. Kinver, 'Javan rhino 'now extinct in Vietnam'', 25 October 2011, <http://www.bbc.com/news/science-environment-15430787>, accessed 15 June 2016.

³¹ Milliken, *supra* n. 16.

³² M. Haryono, U.M. Rahmat, M. Daryan, A.S. Raharja, 'Monitoring of the Javan rhino population in Ujung Kulon National Park, Java', in: 56 *Pachyderm*, 2015, pp. 82-86.

devastating to the survival of the species³³. As one might expect the species has been listed as Critically Endangered by the IUCN since 1996.

2.5 Sumatran rhinoceros (*Dicerorhinus sumatrensis*)

The Sumatran rhinoceros is the smallest species of rhinoceros, although it is still about 1.45 meters in height, up to 3 meters in length and the weight can differ from 800 up to 2000 kilograms³⁴. It is the only rhino species which has body hair. The hair is abundant on bodies of youngsters, but gradually wears off with age. The Sumatran rhino is of a dark gray brown color and has two horns. The frontal horn is often so small however, that it appears to be absent.

Its habitat of preference is hilly country, near water and with a high degree of humidity³⁵. Also the area between forests and cultivated areas, secondary forest if you will, is an area it likes to visit where it feeds on cultivated plants³⁶. It is an agile animal and a good swimmer, even known to venture into the sea. It spends most of the day wallowing and moves by night, feeding on fruit, leaves, twigs, bark, wild mangoes and figs³⁷. Like in all other rhinoceroses, males and females both live a solitary life, with the exception of mother and calf. Females live in territories of about 10 square kilometers centered on a wallow and their territories do not overlap. The 30 square kilometer territories of males do³⁸.

The species consists of 3 subspecies, *Dicerorhinus sumatrensis lasiotis*, *Dicerorhinus sumatrensis harrissoni* and *Dicerorhinus sumatrensis sumatrensis*.

Dicerorhinus sumatrensis lasiotis used to occur in parts of India, Bhutan, Bangladesh and Myanmar but is currently considered extinct, with the odd chance of some still surviving in northern Myanmar³⁹. Of the other two subspecies scattered small populations exist across Indonesia and Malaysia. In total 140 to 210 individuals remain in the wild of which 120-180 of *Dicerorhinus sumatrensis sumatrensis* live in Indonesia and 20 to 30 of *Dicerorhinus sumatrensis harrissoni* live in Malaysia⁴⁰. Both species used to occur across several islands of Indonesia, Malaysia and mainland Thailand. The loss of habitat and poaching are again the main reasons the population of this species has declined by 80% over three generations. This is why the IUCN has labelled the species as Critically Endangered since 1996.

³³ Groves, *supra* n. 26.

³⁴ C.P. Groves, F. Kurt, 'Dicerorhinus sumatrensis', in: 21 *Mammalian Species*, 1972, pp. 1-6.

³⁵ *Ibid.*

³⁶ R.M. Nowak, *Walker's mammals of the world*, (6th ed. The Johns Hopkins University Press, Baltimore, 1999), 1030-1032.

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ N.J. Van Strien, B. Manullang, Sectionov, W. Isnani, M.K.M. Khan, E. Sumardja, S. Ellis, K.H. Han, Boeadi, J. Payne, E. Bradley Martin, *Dicerorhinus sumatrensis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/6553/0>, accessed 15 June 2016.

⁴⁰ Milliken, *supra* n. 16.

3. The Convention on International Trade in Endangered Species of Wild Fauna and Flora: CITES

3.1 CITES

Wildlife trade concerns the buying and selling of live or dead animals and plants and plant or animal derivatives⁴¹. This often transnational form of trade occurs legally but for a large part also illegally. Estimates of the worth of the international illegal wildlife trade range from \$10 billion to \$20 billion a year⁴². These are of course rough estimates, due to the largely secretive and undocumented character of the illegal market. But with the legal market valued at nearly \$100 billion in the EU alone⁴³, illegal rhinoceros horn having an estimated street value of \$65,000 per kilogram⁴⁴ and ivory elephant tusks selling for around \$1,100 per kg⁴⁵ it is not difficult to imagine that illegal wildlife trade constitutes a multi-billion dollar business. Together with drug trade, human trafficking and weapon trading it is one of the four most lucrative criminal industries in the world⁴⁶. The illegal trade in rhinoceros horn is an important part of this industry, constituting one of the major threats to the already vulnerable rhinoceros populations across the globe. The illegal rhino horn trade is currently thriving due to a skyrocketed demand in recent years, from mainly Vietnam, where it is considered a luxury commodity , serving all kinds of medicinal purposes, ranging from the treatment of a mere fever or hangover to terminal cancer⁴⁷. The rise in rhino horn demand has gone hand in hand with the rise in wealth in the country.

This is the second time in recent history that we can see a dramatic increase in rhino poaching and illegal trade. The first took place somewhere in the 1960s and was driven by rhino horn demand for use in traditional Chinese medicine and use in traditional daggers from Yemen (*Jambiya's*). In this period not only rhinoceros trade experienced a peak however. A general increase in global wildlife trade started in the 1970s⁴⁸, steadily increasing up until the present. Already in 1963 the General Assembly of the

⁴¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973; entered into force 1 July 1975) 993 UNTS 243 (CITES) Article 1.

⁴² N. South, T. Wyatt, 'Comparing Illicit Trades in Wildlife and Drugs: An Exploratory Study', in: 32 *Deviant Behavior*, no.6, 2011, pp 538-561.

⁴³ TRAFFIC, 'Wildlife trade: what is it?', <http://www.traffic.org/trade/>, accessed 15 June 2016.

⁴⁴ D. Biggs, F. Courchamp, R. Martin, H.P. Possingham, 'Legal Trade of Africa's Rhino Horns', in: 339 *Science*, no. 6123, 2013, pp. 1038-1039.

⁴⁵ Wildlife Conservation Network, 'Price of Ivory in China Falls Sharply', <http://wildnet.org/updates/price-ivory-china-falls-sharply>, accessed 15 June 2016.

⁴⁶ T. Milliken, 'Illegal Trade in Ivory and Rhino Horn: An Assessment to Improve Law Enforcement Under the Wildlife Traps Project', 2014, TRAFFIC, <https://www.usaid.gov/sites/default/files/documents/1865/W-TRAPS-Elephant-Rhino-report.pdf>, accessed 15 June 2016.

⁴⁷ T. Miliken, J. Shaw, 'The South Africa- Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses corrupt wildlife industry professionals and Asian crime syndicates', 2012, TRAFFIC, http://www.npr.org/documents/2013/may/traffic_species_mammals.pdf, accessed 15 June 2016.

⁴⁸ See Figure 1.

International Union for Conservation of Nature recognized the need for regulation of this rapidly expanding industry and called for “an international convention on regulations of export, transit and import or rare or threatened wildlife species or their skins and trophies”⁴⁹, thereby also recognizing and wanting to prevent the devastating effect unregulated trade could have on an individual species. In the spirit of Rome not being built in a day, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was concluded 10 years later on 3 March 1973 and entered into force on 1 July 1975. As article XXII of the Convention prescribes, this was exactly 90 days after the tenth ratification of the treaty. As of today the total number of member states stands at 182⁵⁰. Quite a substantial number and CITES can be regarded as a success in this sense⁵¹.

Of these 182 Parties, 19 currently host or possibly host a population of one or several of the five different rhinoceros species⁵². Only one of the 20 rhino range states, South Sudan, is not a party to CITES. The existence of a black rhino population there is however highly questionable and the IUCN therefore considers the population as possibly extinct. The same is true for the rhinoceros populations of other CITES Parties like the Democratic Republic of the Congo, Sudan and Myanmar.

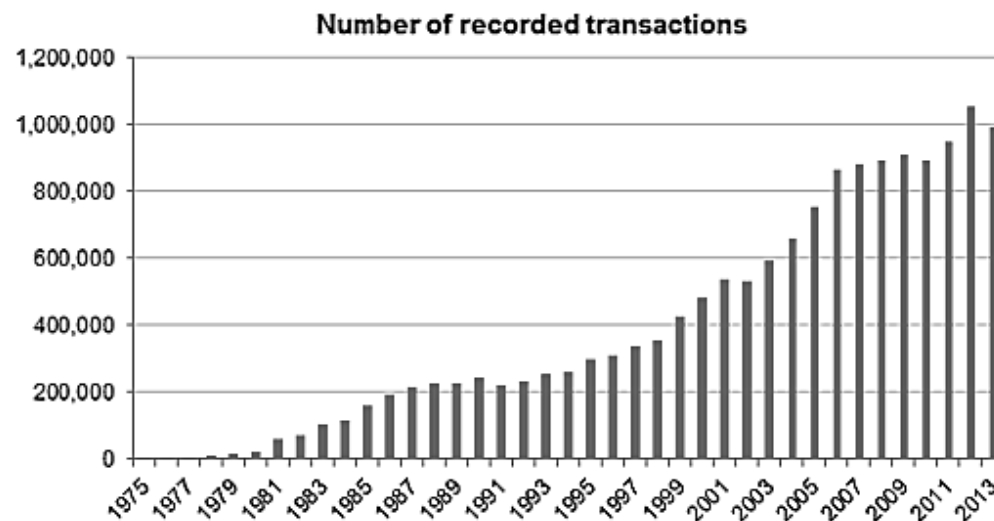


Figure 1. Recorded transactions in the global wildlife trade, <<https://www.cites.org/eng/disc/what.php>>.

⁴⁹ M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010), 484.

⁵⁰ CITES, ‘List of Contracting Parties’, <https://cites.org/eng/disc/parties/chronolo.php>, accessed 15 June 2016.

⁵¹ K. Baakman, *Testing times: the effectiveness of five international biodiversity-related conventions*, (1st ed. Wolf Legal Publishers Utrecht 2011), 264.

⁵² IUCN 2016, *The IUCN Red List of Threatened Species Version 2015-4*, <http://www.iucnredlist.org>, accessed 15 June 2016.

3.1.1 Structure

The administrative structure of the treaty is comprised of the Secretariat, the Conference of the Parties (CoP), the Standing Committee and a number of other permanent committees and the National Management and Scientific Authorities. The Secretariat is more or less the executive organ of the treaty and it arranges and services the meetings of the Parties, prepares reports and makes draft Resolutions⁵³. The Conference of the Parties, which is a meeting of all treaty members, should take place at least once every two years⁵⁴. The Conference is the decision-making body⁵⁵ which decides on various matters. One of its main functions is the issuing of recommendations in order to improve the functioning of the treaty⁵⁶. Of all committees that have been established thus far, the Standing Committee is most prominent. It is in charge of monitoring compliance, implementation and enforcement of the Convention. The Animals and Plant Committees, who both report to the Standing Committee, are two specialized organs providing scientific advice, periodic reviews on species and dealing with nomenclature issues⁵⁷.

An important administrative feature of CITES is that it requires its members to establish national Management and Scientific authorities. These institutions can directly communicate with one another and are in charge of granting import and export permits⁵⁸.

3.2 The system of CITES

CITES works with quite a basic system. It regulates the wildlife trade by prohibiting import or export in listed species unless certain conditions are met and the right permit is used. The mandatory national Management authorities issue these permits and the national Scientific authorities provide advice on the effect of the trade on the species⁵⁹. Species are defined in Article I of the Convention as meaning any species, subspecies or geographically separate population thereof⁶⁰ and the Article goes on defining “specimen” as meaning any animal or plant, whether alive or dead and readily recognizable parts or derivatives thereof⁶¹. This of course includes rhinoceroses, rhino horn, rhino horn powder and other rhino derivatives.

The more than 35,000 different species of animal and plants CITES protects⁶² and of which it regulates the trade are divided over the three Appendices accompanying the Convention text. The protection regime of Appendix I is the strictest, II is less strict and III the least strict. The first Appendix contains the most endangered species of the world, the ones threatened with extinction, and works according to a principle constituting a general prohibition of trade of the species concerned with trade therein only possible in exceptional circumstances. Most rhinoceros populations are included here.

Appendix II is of a more utilitarian character, basically stating that the trade in the species contained therein is allowed, be it under strict conditions, because without those conditions the species would

⁵³ Bowman et al. (2010), op.cit. 487.

⁵⁴ CITES, Article XI (2).

⁵⁵ Bowman et al. (2010), op.cit. 487.

⁵⁶ Article XI (3).

⁵⁷ Bowman et al. (2010), op.cit. 489.

⁵⁸ *Ibid.*, 490.

⁵⁹ CITES, ‘How CITES works’, <https://cites.org/eng/disc/how.php>, accessed 15 June 2016.

⁶⁰ Article I (a).

⁶¹ Article I (b).

⁶² CITES, ‘What is CITES?’, <https://cites.org/eng/disc/what.php>, accessed 15 June 2016.

certainly become endangered. Utilization of the species as long as it does not endanger the species' survival. Some rhinoceros populations are included in this Appendix.

Appendix III concerns species, as it is said in Article II of the Convention, "which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade". So this concerns nationally protected species, but with which a party needs assistance from other Parties in its protection. States can unilaterally list a species in Appendix III, as opposed to the other two Appendices, which require a vote of the Conference of the Parties for amending⁶³. No rhino species or populations are listed on Appendix III.

What it means to be in Appendix I, II or III can be derived from the text of the Convention. Since nearly all species of rhinoceros are listed in Appendix I or II, the articles concerning these Appendices will be discussed. The basic rules governing trade in Appendix I rhinos are stated in Article III of the Convention. Trade in rhinoceroses and rhino products should only occur in exceptional circumstances and is not to be used for primarily commercial purposes. A permit is required for both import and export and such a permit is only granted if the Scientific and Management Authorities of a state are satisfied several conditions, such as the trade not being detrimental to the survival of the rhinoceros species concerned and the rhino product not being obtained in contravention of the laws of that state, are met. The same goes for re-export and introduction from the sea. The conditions regarding Appendix I are quite strict. The conditions regarding Appendix II are less strict and these are mentioned in Article IV of the Convention. Whereas through Appendix I the import of nearly all rhino species for commercial purposes is inadmissible and also requires an import permit for other purposes, the import of Appendix II rhinos does not, making the legal trade in specimens of that category possible⁶⁴.

Trade with non-parties to the Convention is also possible, if that non-party presents comparable documentation to that required by the Convention. Non-customs zones, like duty-free shops, are not out of the scope of the treaty and the same permit requirements apply there⁶⁵.

There are however some situations in which the Convention can make an exception to its application. Article VII states that the permit regime "shall not apply to the transit or transshipment of specimens through or in the territory of a Party while the specimens remain in customs control"⁶⁶. So for instance if rhino horns are moved by plane and the plane has to make a stop on his way to its state of destination in an airport of another state, no special permits are needed for entering and leaving that state of transfer.

Other exceptions are horns or other derivatives that date back from before the Convention entered into force⁶⁷ and the trading of personal or household effects⁶⁸. The latter exemption is in its turn subject to several exceptions of itself⁶⁹. Specimens of captive bred rhinoceroses, listed in Appendix I shall be considered as species included in Appendix II⁷⁰.

Article VII(6) further exempts the exchange of rhino specimens between scientists and scientific authorities from the permit regime stated in the foregoing articles provided they are so registered at the

⁶³ CITES, *supra* n.59.

⁶⁴ Bowman et al. (2010), *op.cit.* 502

⁶⁵ *Ibid.*, 509.

⁶⁶ Article VII.

⁶⁷ Article VII (2).

⁶⁸ Article VII (3).

⁶⁹ Article VII (3)(a)(b).

⁷⁰ Article VII (4).

Management Authorities. Article VII(7) does the same for specimens that are part of travelling zoos, circuses and the like.

On the one hand CITES prohibits trade in rhinoceroses as much as possible but on the other hand wants to contribute to the sustainable utilization of rhino resources by its member states. This is illustrated in its Strategic Vision 2008-2020 : “Conserve biodiversity and contribute to its sustainable use by ensuring that no species of wild fauna or flora becomes or remains subject to unsustainable exploitation through international trade, thereby contributing to the significant reduction of the rate of biodiversity loss”⁷¹.

3.3 CITES and rhinoceroses

The five rhinoceros species are all categorized in Appendix I. The white (*Ceratotherium simum*) and the black (*Diceros bicornis*) since 1977 and the Javan (*Rhinoceros sondaicus*), Sumatran (*Dicerorhinus sumatrensis*) and Indian (*Rhinoceros unicornis*) since 1975⁷². To be categorized in this Appendix rhino species must meet certain biological and trade criteria which were established by the Conference of the Parties in one of their Resolutions⁷³. This Resolution states that species that are or may be affected by trade should be included in Appendix I in accordance with Article II, paragraph 1, if they meet at least one of the biological criteria list in Annex 1. The Annex is enclosed in the Resolution and states the following criteria of which at least one needs to be met⁷⁴:

A. The wild population is small, and is characterized by at least one of the following:

- i) an observed, inferred or projected decline in the number of individuals or the area and quality of habitat;*
- ii) each subpopulation being very small;*
- iii) a majority of individuals being concentrated geographically during one or more life-history phases;*
- iv) large short-term fluctuations in population size; or*
- v) a high vulnerability to either intrinsic or extrinsic factors.*

B. The wild population has a restricted area of distribution and is characterized by at least one of the following:

- i) fragmentation or occurrence at very few locations;*
- ii) large fluctuations in the area of distribution or the number of subpopulations;*
- iii) a high vulnerability to either intrinsic or extrinsic factors; or*
- iv) an observed, inferred or projected decrease in any one of the following:*

- the area of distribution;*
- the area of habitat;*
- the number of subpopulations;*
- the number of individuals;*
- the quality of habitat; or*
- the recruitment.*

C. A marked decline in the population size in the wild, which has been either:

- i) observed as ongoing or as having occurred in the past (but with a potential to resume); or*
- ii) inferred or projected on the basis of any one of the following:*

⁷¹ CITES, Resolution Conf. 16.3, ‘CITES Strategic Vision 2008-2020’.

⁷² IUCN, *supra* n. 52.

⁷³ CITES, Resolution Conf. 9.24 (Rev. CoP16), ‘Criteria for amendment of Appendices I and II’.

⁷⁴ *Ibid.*

- a decrease in area of habitat;
- a decrease in quality of habitat;
- levels or patterns of exploitation;
- a high vulnerability to either intrinsic or extrinsic factors; or
- a decreasing recruitment.

The remaining populations of the five different rhino species all meet at least one and in many cases several of the criteria posed here. Their listing in Appendix I is therefore very understandable.

The Resolution goes on to state that listing should occur by virtue of the precautionary approach, Rio Principle 15⁷⁵, which in this context means that in case of uncertainty regarding the status of a species or the impact of trade on the conservation of a species, the Parties shall act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species⁷⁶.

3.3.1 Split listing

Another matter addressed in the Resolution is that of so-called split-listing, which is the listing of a single species in more than one Appendix. This should be avoided as much as possible and if it does occur it should be on the basis of national or regional populations instead of subspecies.

Concerning rhinoceroses two exceptions to the general rule exist, namely the populations of white rhinoceroses (*Ceratotherium simum*) of both South Africa and Swaziland. These populations are listed in Appendix II of the Convention, “for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and hunting trophies. All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly”⁷⁷.

The white rhinoceros had originally been listed in Appendix I during the first Conference of the Parties in 1976, because at that time the species was threatened with extinction⁷⁸, similar to the other rhinoceros species. The population of white rhinoceros stood between the 1,000 and 3,800 at the time of the concluding of the Convention, making it a threatened species. Conservation efforts since then have however increased South Africa’s white rhinoceros population to about 20,000 in 2013⁷⁹, thereby surpassing its former threatened status. The South African government already recognized this trend of population growth towards stable levels in 1994 and at that time it requested a transfer of its rhinoceros population from Appendix I to II⁸⁰.

South Africa argued that the IUCN did not list the animal as threatened anymore, numbers had grown substantially, the amount of habitat available for further growth of the species was vast and these areas were also protected properly. As Res. Conf. 5.21⁸¹ required, the species could withstand exploitation for

⁷⁵ Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992).

⁷⁶ CITES, *supra* n. 73.

⁷⁷ CITES, ‘Appendices’, <https://cites.org/eng/app/appendices.php>, accessed 15 June 2016.

⁷⁸ CITES, Resolution Conf. 1.1, ‘Criteria for the Addition of Species and Other Taxa to Appendices I and II and for the Transfer of Species and Other Taxa from Appendix II to Appendix I’.

⁷⁹ Milliken, T., Emslie, R. H., & Talukdar, B. (2009, November). African and Asian rhinoceroses—status, conservation and trade. In *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 (Vol. 9)*.

⁸⁰ CITES, Ninth meeting of the Conference of the Parties, Fort Lauderdale, 1994, CoP9 Prop.17, Transfer from Appendix I to Appendix II.

⁸¹ CITES, Resolution Conf. 5.21, ‘Special Criteria for the Transfer of Taxa from Appendix I to Appendix II’.

trade. The exploitation South Africa referred to were the already ongoing practices of trophy hunting and rhino auctions and furthermore suggested other potential utilizations like the selling of products derived from mortalities, the slaughter for products and the ranching for horn. The trade would be subjected to strictly regulated quotas, conservatively based on the size of populations.

The financial benefits reaped from these practices could substantially contribute to the expensive practice of rhino conservation. Therefore South Africa proposed then that their populations of rhinos be transferred from Appendix I to Appendix II. The Conference of the Parties put the proposal to a vote, it passed and so their populations of white rhinoceroses were transferred, subject to said conditions. Swaziland made a similar proposal in 2004⁸² and used many of the same arguments South Africa used in 1994. Its population was also stable and even increasing and like South Africa it referred to one of the main objectives of the World Conservation Strategy issued in 1980⁸³, which wants to “ensure the sustainable utilization of species and ecosystems”. Swaziland’s arguments in the proposal mainly focus on that aspect. If the species would be down listed to Appendix II the possible trade options this will open up would substantially contribute to rhinoceros conservation in the small kingdom. Utilization of the species in the form of trophy hunting, live sales, game viewing and ranching would make it an economically beneficial renewable resource and would encourage private landowners to invest. Since all Swaziland’s national parks and reserves are self-funded the financial benefits of utilization of white rhinoceroses were more than welcome. The managing and protecting of the populations is quite the costly enterprise. The Conference of the Parties also put this proposal to a vote and it passed, thereby transferring the Swaziland white rhinoceros populations from Appendix I to Appendix II, in 2004. Population numbers of white rhinoceros have been growing in both South Africa and Swaziland since 1993⁸⁴. The recent poaching crisis could however bring a stop to that. The number of rhinoceroses illegally killed in South Africa has dramatically increased over the past decade⁸⁵ and the numbers of poached rhinos could exceed the growth number in the near future. This would mean a declining trend of rhino numbers, which could require a reconsideration of the Appendix II listing.

3.4 CITES’ rhino policy

Since the Sixteenth Conference of the Parties held in Bangkok in 2013, several Decisions and Resolutions with regard to rhinoceroses are in effect. The most important being the Resolution called “Conservation of and trade in African and Asian rhinoceroses”⁸⁶. In this Resolution the entire CITES policy regarding rhinoceroses is set out. Originally it was adopted at the ninth meeting of the Parties in Fort Lauderdale in 1994. Since then it has been amended several times, although in general terms it remains quite similar. The current Resolution opens with the findings that four of five rhino species are still threatened with extinction, measures taken in past conferences have not stopped the decline in all rhinoceros populations, illegal trade in rhinoceros horn remains a global law enforcement problem, stocks of rhinoceros horn are still building up in some countries and the calls for their destruction have not been heeded and there is a diversity of opinion as to what the most effective approaches to the conservation

⁸² CITES, Thirteenth meeting of the Conference of the Parties, Bangkok, 2004, CoP13 Prop. 9, Transfer of the population of Swaziland from Appendix I to Appendix II.

⁸³ IUCN, UNEP, WWF, ‘World Conservation Strategy Living Resource Conservation for Sustainable Development’, 1980, IUCN, Gland, Switzerland.

⁸⁴ Miliken, *supra* n. 79.

⁸⁵ *Ibid.*

⁸⁶ CITES, Resolution Conf. 9.14 (Rev. CoP15), ‘Conservation of and trade in African and Asian rhinoceroses’.

of rhinoceroses are⁸⁷.

The Resolution then proceeds to urge all Parties to identify, mark, register and secure their stocks of horn and to adopt and implement comprehensive legislation and enforcement controls aimed at reducing illegal rhinoceros trade. It urges the Secretariat to assist Parties therein where possible and rhino range states to be vigilant in their law enforcement efforts and to apply severe punishments to violations as deterrents. Parties should increase law enforcement cooperation among range and implicated States through existing or newly created mechanisms.

It directs the Standing Committee to continue to pursue actions aimed at ending illegal trade in rhinoceros parts and derivatives. Recommendations made to range states are to develop and implement a budgeted conservation and management plan for rhinoceroses as soon as possible.

The IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC are recommended to submit a written report to the Secretariat at least six months before each meeting of the Parties, which the Secretariat will then distribute amongst the different Parties.

The Resolution finishes with a general encouragement to the Parties and a call upon governments, intergovernmental and non-governmental organizations to fund rhinoceros conservation activities around the globe, especially those aimed preventing the illegal killing of rhinos⁸⁸.

This Resolution is made up of quite general recommendations and measures and is not very specific or concrete. It functions as a sort of guideline for the Parties' policies on rhino conservation. The Decisions issued by the Secretariat are much more specific and of a more practical nature. As the Resolution speaks more in terms of recommending, urging and encouraging, the Decisions speak about 'should'. Although the treaty itself is binding under international law, the Resolutions and Decisions taken by the Conference of the Parties are not. However, in interpreting the treaty, complying with its obligations and in deciding if treaty obligations have been complied with, these Resolutions and Decisions play an authoritative role. They function as guidelines and recommendations as to how Parties should implement the treaty obligations and not abiding by those guidelines or recommendations could therefore constitute a violation of the treaty itself.

3.5 Decisions regarding rhinoceroses at the 16th Meeting

As stated before the Decisions 16.84 to 16.92 taken at the 16th Conference of the Parties are much more specific and much more concrete in the obligations they put forward than the Resolution.

Decision 16.84 regarding rhinoceroses is aimed at all Parties. It states that Parties should immediately notify the Secretariat of all seized illegal rhinoceros specimens and also notify the countries of origin⁸⁹. If that country cannot be determined then the Secretariat should be notified of that. All Parties should also enact legislation to facilitate the use of specialized investigation techniques in the investigation of wildlife-crime-related offences. Also they should maximize the impact of enforcement actions by using other tools and regulations in support of wildlife legislation and prosecute members of organized crime groups implicated in rhinoceros related crimes. To achieve this Parties should use a combination of relevant legislation which carry appropriate penalties that will act as effective deterrents, whenever possible.

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

⁸⁹ CITES, 2013, Decisions of the Conference of the Parties in effect after the 16th meeting, Species trade and conservation, Rhinoceroses (*Rhinocerotidae* spp.), 16.84.

Parties should submit rhinoceros horn samples subject to criminal investigation, to designated accredited forensic laboratories for DNA-analysis. Parties should consult with the country of destination prior to issuing permits or certificates. Parties should introduce national measures to regulate internal trade in specimens of rhinoceros and consider introducing stricter domestic measures to regulate the re-export of rhinoceros horn products from any source⁹⁰.

The next Decision, 16.85, is directed to all Parties implicated in the illegal trade of rhinoceros horn, either as a consumer or a supplier. Those States should develop and implement strategies aimed at driving down the demand of rhino horn, by reducing the illegal movement and consumption of rhino products⁹¹. In the Annex of CoP16 Doc. 54.1, a Party can find a strategy based on 5 principles to reduce the demand for rhino horn products⁹². The Decision asks Parties to take these principles into account when constructing a strategy of their own. Parties should also involve local communities in all aspects of combatting illegal rhino horn trade, by increasing local awareness of the impact illegal trade has and encouraging the general public to report illegal activities. Decision 16.85 finishes with Parties being asked to provide information on the effectiveness of the programs and strategies they applied by 31 January 2015, so an exchange of experiences can take place at the 66th meeting of the Standing Committee.

Vietnam is the specific addressee of Decision 16.86, as one of the Parties implicated in the illegal trade of rhinoceros horn⁹³. Together with South Africa it has established the South Africa – Vietnam 2012-to-2017 Joint Action Plan in the past and in this Decision Vietnam is urged to make progress with the development and implementation thereof, which means strengthening the management of rhino horn trophies and take on a stricter approach when it comes to dealing with suspects accused of rhino horn related crimes. As promised by Vietnam in CoP16 Inf. 24⁹⁴. Vietnam should also conduct consumer behavior research with the aim of establishing strategies for reducing rhino horn use and consumption and compile a report on progress made on implementing the requirements of Resolution Conf. 9.14. This report should at least include an update on arrests, seizures, prosecutions and penalties for offences related to illegal rhino horn possession and on any activities and measures implemented to combat illegal killing of rhinoceros and illegal rhinoceros horn trade. Further Viet Nam should report on the effectiveness of Decision 11. This domestic decree prohibits all sales of rhinoceroses and rhino derivatives in Vietnam and bans the import of white rhino, Indian rhino and African elephant into the country⁹⁵.

Mozambique and South Africa are the addressees of Decisions 16.87 and 16.88⁹⁶. They should increase cooperation in areas regarding the illegal rhino horn trade not only with each other but also with neighboring states and report on progress made. Mozambique should implement the requirements of Resolution Conf. 9.14., prioritize legislation aimed at combatting rhino related crimes combined with deterring penalties and of course provide a comprehensive report of measures taken. The Decisions then turn to the internal organs of the CITES organization.

⁹⁰ *Ibid.*

⁹¹ CITES, *supra* n. 89, 16.85.

⁹² CITES Secretariat, 2013, 'Interpretation and Implementation of the Convention-Species Trade and Conservation: Rhinoceroses', Report of the Working Group, CoP16 Doc. 54.

⁹³ CITES, *supra* n. 89, 16.86.

⁹⁴ CITES, 2013, 'Illegal trade of rhinoceros horn in Viet Nam (submitted by Viet Nam)', Information document, CoP16 Inf. 24.

⁹⁵ *Ibid.*

⁹⁶ CITES, *supra* n. 89, 16.87-16.88.

The Secretariat shall establish a CITES Rhinoceros Enforcement Task Force, consisting of representatives of EUROPOL, ICCWC (International Consortium on Combatting Wildlife Crime), rhino states and, as needed, other experts or representatives, with the job of increasing international cooperation. The Joint Action Plan of South Africa and Vietnam could be an example of such cooperation.

Also the Secretariat will develop a manual containing guidelines on best practices, protocols and operational procedures promoting the use of wildlife forensic technology. This technology basically consists of a general DNA database of rhinoceroses, which authorities can then use to verify the origin of horns in question⁹⁷. The establishment of the Task Force and the creation of the guidelines are subject to external funding.

The Secretariat shall further examine the progress made by Parties in restricting illegal rhino trade, thereby paying special attention to Vietnam, and examine the implementation of Resolution Conf. 9.14 in states where rhino killing is a major threat to populations, particularly South Africa and Zimbabwe. It shall try to gain funding to undertake a technical mission to the Lao People's Democratic Republic to assess current enforcement activities in the area of rhinoceros trade. The Secretariat shall also revise Resolution Conf. 9.14 and submit the revised version at the 17th meeting of the Conference of the Parties in 2016.

The Working Group on Rhinoceroses shall evaluate the reports made by Vietnam, Mozambique, South Africa and the Secretariat and report on this evaluation at the 66th Meeting of the Standing Committee. The Standing Committee in its turn shall consider the recommendations made by the Working Group on Rhinoceroses and of the Secretariat and decide on further actions to be taken⁹⁸.

The Working Group received reports, as required by the relevant Decisions, from Vietnam, South Africa and Mozambique, although Mozambique handed it in two months past the deadline which limited the extent of consideration by the Working Group⁹⁹. The Working Group assessed the reports and made recommendations accordingly¹⁰⁰ and, as prescribed, compiled an information document for the 65th meeting of the Standing Committee. Here it discusses the reports made by Vietnam, South Africa and Mozambique.

Vietnam has reported on several positive developments regarding illegal rhinoceros trade. It reported on a domestic directive issued by its Prime Minister on 20th February 2014 called: "On strengthening the direction and implementation of measures for controlling and protecting endangered, rare and precious wild animals". This directive, *inter alia*, provides a large part of domestic Ministries with a mandate to review and make recommendations for improving legal provisions concerning illegal wildlife trade. As a result all Ministries and the administrative bodies of provinces have developed action plans to implement the directive. Furthermore Vietnam has reported updates on seizures made, its increasing focus on the internal market rather than the external market, on attempts at increasing of awareness among communities and their leaders and it acknowledges it needs to improve upon the deterrent effect of sentences. The report sent to the Working Group by Vietnam sends an overall message of willingness to deal with the problem of illegal trade in rhinoceros derivatives.

The report from Mozambique did not get such a reception by the Working Group. Information given in

⁹⁷ CITES, 'Forensics to support the fight against wildlife crime', https://cites.org/eng/news/pr/2013/20131106_forensics.php, accessed 15 June 2016.

⁹⁸ CITES, *supra* n. 89, 16.91.

⁹⁹ CITES Standing Committee, 2014, 'Interpretation and implementation of the Convention – Species Trade and conservation: Rhinoceroses', Report of the Working Group, SC65 Doc. 43.1.

¹⁰⁰ *Ibid.*

the report is limited although some potentially positive developments were mentioned. Such as a new Conservation Law, which would increase maximum prison sentences and fines for poaching involvement, new anti-poaching measures in Limpopo National Park and an Anti-Poaching Task Force was approved in February 2014. According to the Working Group however, information was too limited to draw a proper conclusion. South Africa reported on its Memorandum of Understanding signed with Mozambique as it was asked to increase bilateral cooperation in Decision 16.88.

The general conclusion of the Working Group's report is that although encouraging developments have taken place as a result of Decisions 16.84 to 16.92, the poaching problem still exists and is increasing. The results of the measures taken by countries have yet to be seen.

3.6 Export quotas for black rhinoceros hunting trophies

Since the Thirteenth meeting of the Conference of the Parties, export quotas for black rhinoceroses have applied. The quotas, which consist of the annual export of five adult male black rhinoceroses from both South Africa and Namibia, were established based on the idea that the benefits derived from such sales could aid in species conservation and populations in several range states were stable enough to withstand limited exploitation. As established in a Resolution from the second meeting of the Conference of the Parties 1979¹⁰¹, exporting countries may grant export permits for rhinoceros hunting trophies, as an Appendix I species, in accordance with Article III paragraph 2 of the Convention. This means that the export should not be detrimental to the survival of the black rhinoceros, the black rhino specimen should not have been obtained in contravention of domestic law and an import permit was granted for the specimen¹⁰².

An import permit for a rhino hunting trophy can only be granted when a Management Authority of the State of import is convinced that it is not to be used for primarily commercial purposes¹⁰³. In the Decision establishing the export quota it was further emphasized that, according to Resolution 9.21 (Rev. Cop13)¹⁰⁴, the establishment of an export quota for black rhinoceros satisfies the requirements of Article III, paragraphs 2(a) and 3 (a) and that the purpose of the import will not be detrimental to the survival of the species if such a quota is not exceeded and the populations concerned can sustain the exploitation¹⁰⁵. With this in mind the Conference of the Parties reached the following decision regarding export quotas for black rhinoceros hunting trophies:

The Conference of the Parties:

Approves the establishment of an annual export quota of five hunting trophies of adult male black rhinoceros from South Africa and five from Namibia;

Agrees that hunting trophies of the black rhinoceros are defined as the horns or any other durable part of the body, mounted or loose and that all parts to be exported should be individually marked with reference to the country of origin, species, quota number and year of export; and

¹⁰¹ CITES, Resolution Conf. 2.11. (Rev. CoP9), 'Trade in hunting trophies of species listed in Appendix I'.

¹⁰² Article III (2).

¹⁰³ Article III (3).

¹⁰⁴ CITES, Resolution Conf. 9.21 (Rev. CoP13), 'Interpretation and application of quotas for species included in Appendix I'.

¹⁰⁵ CITES, Resolution Conf. 13.5 (Rev. CoP14), 'Establishment of export quotas for black rhinoceros hunting trophies'.

Recommends that:

- a) *in reviewing applications for permits to import black rhinoceros hunting trophies, in accordance with Article III, paragraph 3 (a), of the Convention, and Resolution Conf. 9.21 (Rev. CoP13), paragraph b), the Scientific Authority of the State of import approve permits if it is satisfied that the trophies being considered are from a range State to which an export quota has been granted as part of a national black rhinoceros conservation and management plan or programme and will be traded in accordance with the provisions of the present Resolution;*
- b) *in reviewing applications for permits to import black rhinoceros hunting trophies, in accordance with Article III, paragraph 3 (c), of the Convention, the Management Authority of the State of import be satisfied that such trophies are not to be used for primarily commercial purposes if:*
 - i) *the trophies were acquired by the owners in the country of export and are being imported as personal items that will not be sold in the country of import; and*
 - ii) *each owner imports no more than one trophy in any calendar year (1 January to 31 December);**and*
- c) *amendments to export quotas or the establishment of additional export quotas for this species be done in accordance with Resolution Conf. 9.21 (Rev. CoP13).*

3.7 CITES on the use of traditional medicines

The use of rhino horn in traditional medicine is still a big threat to rhinoceros populations worldwide. In traditional Chinese medicine it is attributed with different healing powers, able to cure different ailments such as headaches or fevers and nowadays it is even used in healing cancer¹⁰⁶. The demand for rhino horn therefore remains high in some Asian countries, making it the biggest illegal market for rhino derivatives. For that reason the view of the Conference of the Parties on traditional medicine can be important factor in the conservation of rhinoceros species worldwide. At the tenth meeting of the Conference of the Parties in Harare it laid down its policy regarding traditional medicine in a Decision, which was revised at the fourteenth meeting¹⁰⁷. The Conference of the Parties acknowledges here that the practice of traditional medicine is of vital importance to millions of people, it is a rational system of thought and practice developed over several millennia and that it is dependent on the sustainable harvesting of wild species¹⁰⁸. Nevertheless, over-exploitation of the rhinoceros is imminent and the Conference of the Parties believes adequate measures in this area are necessary¹⁰⁹. It therefore makes several recommendations to the Parties.

Parties are recommended to work closely with the traditional medicine industry, both consumers and producers, to educate and develop awareness among the public to eliminate the illegal use of endangered species such as rhinoceroses and prevent their over-exploitation. Parties are recommended to promote techniques, like forensic science, to identify the parts or derivatives of endangered species used in traditional medicines and to promote the use of substitute ingredients of a synthetic nature or of other not endangered species. Parties should also consider where possible and in accordance with their legislation to meet the demand for rhinoceros products by captive breeding. This could relieve the pressure on wild populations. Furthermore, Parties are urged to ensure that traditional medicines

¹⁰⁶ Miliken, *supra*, n. 47.

¹⁰⁷ CITES, Resolution Conf. 10.19 (Rev. CoP14), 'Traditional medicines'.

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*

intended for domestic use remain in the domestic market and to make sure tourists and visitors to their nation do not take medicine with them that contains rhinoceros derivatives without the proper papers, as article VII paragraph 3 of the Convention prescribes¹¹⁰. To facilitate this latter recommendation some Parties may need to apply stricter domestic measures.

These are the general recommendations made to Parties to make sure the traditional medicine industry does not cause the demise of species such as the rhinoceros.

3.8 CITES: an assessment from the rhino perspective

The aim of the Convention on International Trade in Endangered Species of Wild Fauna and Flora is to ensure that the international trade in specimens of wild animals, like the rhinoceros, does not threaten their survival¹¹¹. The treaty and its bodies have taken several initiatives to combat threats to the survival of the rhinoceros, with the main threat being the illegal trade in rhinoceros horn and the corresponding practice of poaching. CITES' main reaction to this has been the placing of rhinoceroses in Appendix I of the treaty. This is the category subject to the strictest trade regime and constitutes a *de facto* prohibition on trade. On paper the rhinoceros, with the exception of two populations, enjoys the highest level of protection the treaty has to offer and Parties are bound to apply the treaty rules that accompany this level of protection. The inclusion of most rhinoceros populations in this Appendix is from a conservation point of view probably a very positive development.

The Resolutions and Decisions dealt with in this study, addressing the rhinoceros are elaborations or explanations of those treaty rules. The rhinoceros has been quite extensively covered by CITES and a general Resolution regarding the species has been drafted, which sets out guidelines and makes recommendations as to what states have to do to combat illegal rhinoceros trade¹¹². Such a resolution is not legally binding but gives a state guidance in implementing its obligations under the treaty.

This is also where a major problem of the treaty lies. A treaty lives or dies by its implementation in national law and more than 50% of the Parties have to date not implemented sufficient legislation to meet CITES requirements¹¹³, which of course severely hampers the functioning of the treaty. So although the treaty has reached a very high degree of ratification, if Parties do not implement or apply the provisions its effect will be little.

The overall effectiveness of CITES has been deemed unsatisfactory in a recent study¹¹⁴. This was due to *inter alia* the lack of funding or financial capabilities, lack of implementation, lack of adequate monitoring and a lack of public awareness¹¹⁵. These are the areas where CITES should improve in general for the sake of the rhino.

That CITES has not solved the problems concerning illegal rhino horn trade is evident. Illegal trade is thriving and expanding, with CITES struggling to keep up. Poaching numbers have been rapidly increasing over the past few years and so is the demand for rhino horn¹¹⁶. As horn prices remain high and the chance of persecution remains low, poaching is an attractive option for impoverished people

¹¹⁰ Article VII (3).

¹¹¹ CITES, *supra*, n. 62.

¹¹² CITES, *supra*, n. 86.

¹¹³ Baakman (2011), *op.cit.* 259.

¹¹⁴ *Ibid*, 265.

¹¹⁵ *Ibid*.

¹¹⁶ IUCN, 'IUCN reports deepening rhino poaching crisis in Africa', 9 March 2016, <http://www.iucn.org/content/iucn-reports-deepening-rhino-poaching-crisis-africa>, accessed 15 June 2016.

living near rhino habitats to earn a substantial income.

As CITES already urged states to do, poachers should be discouraged through the raising of sanctions for violations, which would increase their deterrent effect¹¹⁷. Also states are urged to develop programs to raise public awareness. Perhaps CITES itself should take a more pro-active stance in this matter though and develop its own public awareness program. The Ramsar Convention also has a so-called CEPA program to increase awareness concerning wetlands¹¹⁸ and NGO's have proven several times in the past that once the public becomes aware of the adverse effects the use of wildlife products can have on the survival of a species, demand can drop dramatically. CITES could possibly establish a similar program concerning illegal rhino horn trade, rhino poaching and use of rhino products.

The Decisions and Resolutions drafted by CITES have also had a positive effect. As the report of the Working Group on Rhinoceroses prepared for the Sixteenth Meeting of the Conference of the Parties shows, many countries implicated in the rhino horn trade, such as South Africa, Vietnam and Kenya, have increased their efforts in combatting it¹¹⁹. Unfortunately, the Working Group also concluded that the illegal trade is still continuing. Therefore it recommends that Parties along with NGO's and enforcement communities should continue their efforts to eradicate the illegal trade in rhino horn. The report then proceeds to give specific recommendations to do so, such as *inter alia* the improvement of national legislation including adequately deterrent punishments, the continuance of range states to monitor and protect rhinoceroses in protected areas and the movement of rhinos to the safest possible areas¹²⁰.

Rhinoceroses are prominently on the agenda of CITES and will probably remain there as long as the current poaching crisis will last. Meanwhile one could raise its doubts as to whether or not CITES is able to ever fully stop the poaching of rhinoceroses and the selling of their products, by sticking to its current way of dealing with the issue. Some argue that another way of solving the crisis is by accepting the existing demand and trying to meet it in a legal manner, subject to several safeguards such as the establishment of a central selling organization¹²¹. By harvesting the horn and selling it legally, no rhinoceroses would have to be killed and additional funds would be generated to contribute to conservation¹²². Opinions differ however on whether or not this will be effective,¹²³ or if it will merely exacerbate the poaching problems¹²⁴. These dissenting opinions basically concern the debate between strict preservation and sustainable use. Preservationists advocate a complete prohibition on trade, emphasizing the intrinsic or aesthetic value of a species and proponents of sustainable use argue one

¹¹⁷ CITES, *supra*, n. 86.

¹¹⁸ Ramsar Secretariat, Resolution XII.9 CoP12, 'The Ramsar Convention's Programme on communication, capacity building, education, participation and awareness (CEPA) 2016-2024'.

¹¹⁹ CITES, *supra*, n. 92, para 23.

¹²⁰ *Ibid.*

¹²¹ Biggs et al. (2013), *supra* n. 44.

¹²² E. Di Minin, J. Laitila, F. Montesino-Pouzols, N. Leader-Williams, R. Slotow, P.S. Goodman, A.J. Conway, A. Moilanen, 'Identification of policies for a sustainable legal trade in rhinoceros horn based on population projection and socioeconomic models', in: 29 *Conservation Biology*, no. 2, 2014, pp. 545-555.

¹²³ D.J. Crookes, J.N. Blignaut, 'Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand', in: 28 *Journal for Nature Conservation*, 2015, pp. 11-18.

¹²⁴ M. 't Sas-Rolfes, T. Fitzgerald, 'Can a legal horn trade save rhinos?', *PERC Research Paper*, no. 13-6, 2013.

should use the economic value species possess¹²⁵.

At the 17th meeting of the Conference of the Parties, which will take place in Johannesburg from the 24th

of September till the 5th of October 2016 rhinoceroses are one of the subjects yet again and a new assessment can be made as to the current rhinoceros state of affairs. That the fore mentioned debate will be relevant at the upcoming summit is proven by a proposal Swaziland is planning to present there¹²⁶. Swaziland wants to amend the Appendix II listing of its southern white rhinoceroses as to allow a limited and regulated trade in rhino horn, with buyers being designated retailers under supervision of CITES. All horns would be documented and registered in a DNA database, a national register and with TRAFFIC¹²⁷, which is the leading NGO monitoring the international wildlife trade¹²⁸. Swaziland's position on the matter

is that of many states in the Southern African Development Community (SADC)¹²⁹ and is founded on the rationale that the current situation is not working and it would be senseless to let all the proceeds of rhinoceros horn fall into the hands of criminals, while it could also be used for the benefit of rhinoceros conservation¹³⁰.

South Africa also felt this way and was planning on handing in a similar proposal to Swaziland's, but decided not to at the last minute. South Africa has however recently lifted its domestic trade ban¹³¹, because its Supreme Court denied an appeal by the Government to a Pretoria High Court decision which lifted the ban¹³². The case was initiated by two rhino farmers in South Africa, who are in the possession of massive stockpiles of harvested rhino horn¹³³. Although this decision only concerns the domestic

Rhino Range State	Entry into force of CITES
Angola	31-12-2013
Botswana	12-02-1978
Democratic Republic of the Congo	18-10-1976
India	18-10-1976
Indonesia	28-03-1979
Kenya	13-03-1979
Malawi	06-05-1982
Malaysia	18-01-1978
Mozambique	23-06-1981
Myanmar	11-09-1997
Namibia	18-03-1991
Nepal	16-09-1975
South Africa	13-10-1975
South Sudan	-
Sudan	24-01-1983
Swaziland	27-05-1997
Tanzania	27-02-1981
Uganda	16-10-1991
Zambia	22-02-1981
Zimbabwe	17-08-1981

Table 2. Rhino range states & entry into force of CITES .<www.cites.org>.

¹²⁵ S. Young, 'Contemporary Issues of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate Over Sustainable Use', in: 14 *Colorado Journal of International Environmental Law and Policy*, no. 1, 2003, pp. 167-190.

¹²⁶ CITES, *supra* n. 82.

¹²⁷ *Ibid* blz 7

¹²⁸ TRAFFIC, 'What we do?', <http://www.traffic.org/overview/>, accessed 15 June 2016.

¹²⁹ CITES, *supra* n. 82, 8.

¹³⁰ CITES, *supra* n. 82, 6.

¹³¹ E. Stoddard, 'South African court gives green light to domestic trade in rhino horn', 23 May 2016, <http://www.reuters.com/article/us-safrica-rhinos-idUSKCN0YE1R7>, accessed 15 June 2016.

¹³² *Kruger and Another v. The Minister of Water and Environmental Affairs and Others* 2015 (1) All SA 565 (GP).

¹³³ R. Bale, 'An Inside Look at the World's Biggest Rhino Farm', 22 January 2016, <http://news.nationalgeographic.com/2016/01/160122-Hume-South-Africa-rhino-farm/>, accessed 15 June 2016.

trade and the international trade ban remains intact, it could prove to be relevant however as South Africa is the most important rhino range state. What these recent developments mean for the future remains to be seen, with the first decisive moment being the CoP 17, taking place later this year. However new ways of dealing with the crisis deserve to be explored as the current trade ban of CITES has not yet had the desired effect.

4. The Ramsar Convention

4.1 Ramsar

The Ramsar Convention was adopted on the 2nd of February 1971 and was originally aimed at preserving wetlands for waterfowl, which can be recognized in its full name; the 1971 Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat¹³⁴. In the meantime its scope of protection and expertise has widened ranging further than, although still of vital importance, waterfowl and is centered more on the general protection of wetlands and its wise use. The current mission of the Convention, stated in its 4th Strategic Plan 2016-2024 and adopted at the 12th meeting of the Parties in 2015, is: “Conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world”¹³⁵. Conservation and wise use aimed at sustainable development of wetlands. A definition of a wetland can be found in Article 1(1) of the Convention¹³⁶, which states: “wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”. This definition envelops a lot of different areas and vast stretches of territory. At the moment approximately 9 percent of the earth is covered with areas that qualify as a wetland habitat¹³⁷.

Wetlands serve several uses for ecosystems, they provide a habitat for a large number of plants and species, function as a water supply, water purifier, climate regulator, flood regulator and as coastal protection¹³⁸. They also have an economic function in transportation, food production, water risk management, pollution control, fishing and hunting, leisure activities and the provision of ecological infrastructure¹³⁹. Wetlands therefore, are important to preserve and protect. Rhinoceroses, especially the three Asian subspecies, can benefit from this protection because wetlands are a vital part of their habitat. By protecting wetland areas, the ecosystem in which rhinoceroses live can be protected. So in that sense the Ramsar Convention is a significant convention to the conservation of rhinoceroses worldwide.

An essential feature of the Convention is the List of Wetlands of International Importance, which contains 2,231 sites and 214,936,005 hectares of wetland spread over the current 169 parties to the Convention¹⁴⁰. Each of these parties had to add at least one wetland to the List when signing the Convention¹⁴¹. Of the twenty rhino range states in the world, only Angola currently is not a party, so all

¹³⁴ Convention on Wetlands of International Importance Especially as Waterfowl Habitat (adopted 2 February 1971; entered into force 21 December 1975) 996 UNTS 245 (Ramsar Convention).

¹³⁵ Ramsar Secretariat, Resolution XII.2 CoP12, ‘The Ramsar Strategic Plan 2016-2024’.

¹³⁶ Ramsar Convention, Article 1.

¹³⁷ M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010), 403.

¹³⁸ Ramsar, *supra*, n. 135, p. 7.

¹³⁹ *Ibid.*

¹⁴⁰ Ramsar Secretariat, ‘Contracting Parties to the Ramsar Convention’, 5 September 2015, http://www.ramsar.org/sites/default/files/documents/library/annotated_contracting_parties_list_e.pdf, accessed 15 June 2016.

¹⁴¹ Article 2 (4).

of the most important rhino range states are represented. However, of all the wetland sites included in the list, probably only 11 are important to rhinoceroses, which you can see in Table 4, which is based on information contained on the IUCN Red List.

Ramsar site and designation year	Country	Size (ha)	Rhino species
Okavango delta (1996)	Botswana	5,537,400	Black rhinoceros – White rhinoceros
Berbak National Park (1992)	Indonesia	162,700	Sumatran rhinoceros
Lake Baringo (2002)	Kenya	31,469	White rhinoceros
Lake Nakuru (1990)	Kenya	18,800	Black rhinoceros – White rhinoceros
Lower Kinabatangan – Segama Wetland (2008)	Malaysia	78,803	Sumatran rhinoceros
Etosha Pan, Lake Oponono & Cuvelai drainage (1995)	Namibia	600,000	Black rhinoceros
Beeshazar and Associated Lakes (2003)	Nepal	3,200	Indian rhinoceros
Ndumo Game Reserve (1997)	South Africa	10,117	Black rhinoceros – White rhinoceros
Makuleke Wetlands (2007)	South Africa	7,757	Black rhinoceros – White rhinoceros
Luangwa Flood Plains (2007)	Zambia	250,000	Black rhinoceros
Victoria Falls National Park (2013)	Zimbabwe	-	White rhinoceros

Table 3. Ramsar Wetlands important to rhinoceroses. < <http://www.iucnredlist.org>>.

4.2 The System

Generally speaking the Convention concerns the commitment of the Contracting Parties to wisely use all of their wetlands¹⁴². Further, the Ramsar system functions on the basis of the List of Wetlands of International Importance. If a wetland is listed there, it enjoys the protection of the Convention. A wetland can be added to the list by a state on a unilateral basis or as Article 2 (1) puts it: “Each Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance...”¹⁴³. These areas, once designated, have to be expressly delineated and described¹⁴⁴. There is no limit on the number of wetlands a party can include and the minimum of sites to be included lies at one¹⁴⁵. The criteria or reasons for inclusion of a wetland are recited in Article 2(2) of the Convention. A site should be listed if it is significant in terms of ecology, botany, zoology, limnology or hydrology and in first instance wetlands of international importance to waterfowl at any season, should be included. The importance of a particular site for waterfowl is still a major reason to

¹⁴² K. Baakman, *Testing times: the effectiveness of five international biodiversity-related conventions*, (1st ed. Wolf Legal Publishers Utrecht 2011), 111.

¹⁴³ Article 2 (1).

¹⁴⁴ *Ibid.*

¹⁴⁵ Article 2 (4).

list a site and was the reason for many sites to be listed over the course of the Convention's history. The presence of rhinoceroses can however also be a reason to list a wetland site. In arguing for the listing of a site one could relate the presence of rhinoceros to being of 'importance to zoology' as mentioned in the article. 'Importance to zoology' remains a quite broad definition though. Another, more specific way of arguing for the listing of a site exists. In its Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance of the Convention on Wetlands, the Conference of the Parties have established criteria for identifying 'list-worthy' wetlands. These criteria concern *inter alia*, the uniqueness or rarity of the type of wetland (Criterion 1), its importance to biodiversity or its importance to fish or waterfowl (Criterion 4 – 9)¹⁴⁶, but Criterion 2 is especially important here because it states: "a wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities". The IUCN Red Lists and the Appendices of CITES and CMS can be guiding references in such cases. So not only its importance for waterfowl but also its importance to endangered species such as the rhinoceros can be a decisive factor in a wetland's potential listing.

Once sites are listed they usually remain there. However this is not an obligation and the Convention does offer possibilities to remove sites from the list. When 'urgent national interests' are at stake the Convention allows states at their own discretion to extend, delete or restrict the boundaries of a listed wetland¹⁴⁷. States are in such cases only obliged to inform the Secretariat¹⁴⁸ of the changes made. The decision on what amounts to 'urgent national interests' is left entirely at the parties' discretion, which could pose problems for the protection offered by the Convention. If states use this authority at will and apply this definition very broadly it could severely affect the protection the Convention should give. To prevent this, the Conference of the Parties at its 8th Meeting established guidelines on what parties should take into account in considering what amounts to 'urgent national interests'¹⁴⁹. Twelve factors are mentioned which parties are to consider such as *inter alia*, whether immediate action is required to avert a significant threat, whether maintaining the status quo threatens a national interest and the particular value of habitats harboring endemic, threatened, rare, vulnerable or endangered species. This last factor could provide a safeguard for the Ramsar sites harboring rhinoceroses, to not be deleted on a whim. Whenever a deletion or restriction does occur, the party involved should compensate the loss of wetland somewhere else as far as possible¹⁵⁰. Deletions have not occurred up until now, but restrictions have been numerous¹⁵¹. The latter usually is merely the consequence of a stricter demarcation than the initial one. Thus it is fairly safe to say that once a site is designated as a Ramsar site, it will generally remain within its protective regime.

That protective regime of the Ramsar Convention is based on the concept of 'wise use'. States parties have an obligation under the Convention and as it is an international treaty a binding obligation¹⁵², to

¹⁴⁶ Ramsar Secretariat, Resolution VII.11 CoP7, amended by Resolutions VII.13 (1999), VIII.11 and VIII.33 CoP8, IX.1 Annexes A and B CoP9 and X.20 CoP10, 'Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance of the Convention on Wetlands (Ramsar, Iran, 1971)'.

¹⁴⁷ Article 2(5).

¹⁴⁸ *Ibid.*

¹⁴⁹ Ramsar Secretariat, Resolution VIII.20 CoP8, 'General guidance for interpreting "urgent national interests" under Article 2.5 of the Convention and considering compensation under Article 4.2'.

¹⁵⁰ Article 4(2).

¹⁵¹ Bowman et al. (2010), *op.cit.* 412.

¹⁵² Vienna Convention on the Law of Treaties (adopted 23 May 1969; entered into force 27 January 1980) 1155 UNTS 333 (Vienna Convention), Article 26.

“formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory”¹⁵³.

At first glance there seems to be a distinction in article 3(1) between the wetlands on the List and those who are not, but Article 4(1) nuances that distinction by stating that: “Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening”. The obligation to preserve and make wise use of wetlands are therefore the central features in the Ramsar protection.

In its Strategic Vision 2016-2024, the Conference of the Parties defines wise use of wetlands as “the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development” and states “wise use therefore has at its heart the conservation and sustainable use of wetlands and their resources, for the benefit of people and nature”¹⁵⁴. This is not to say that every wetland should be developed or used for their resources, but only where it is deemed appropriate.

Currently, states parties can, whenever they are in doubt as to how to interpret their wise use obligation, resort to the Ramsar ‘toolkit’ of *Wise Use Handbooks*¹⁵⁵. Each handbook, 21 in total, concerns a different subject regarding wetlands. Among the subjects are *inter alia* coastal management, river-basin management, managing groundwater and a handbook on avian influenza & wetlands¹⁵⁶.

States furthermore, have the obligation to report any ecological changes or deteriorations of wetlands to the organization responsible for the continuing bureau duties¹⁵⁷, which is currently the IUCN¹⁵⁸. These changes or deteriorations are meant to mean human-induced ones¹⁵⁹. The Conference of the Parties is then competent “to make general or specific recommendations to the Contracting Parties regarding the conservation, management and wise use of wetlands and their flora and fauna”¹⁶⁰, regarding the ecological changes or deteriorations of wetlands mentioned in Article 3(2). The Montreux Record plays an important role here. This record is a list of sites where such changes or deteriorations have taken place and in the Recommendation that called for the establishment of such a list, parties are also urged to take swift and effective action to restore the changes in ecological character¹⁶¹.

States are obliged under the Ramsar Convention to wisely use their wetland territories, protect them and establish nature reserves on them¹⁶². Under Article 4 of the Convention parties shall encourage research and the exchange of data and publications regarding wetlands and their flora and fauna, states shall attempt to increase waterfowl populations on the designated wetlands and states shall promote the training of personnel competent in the fields of wetland research, management and wardening. Two more matters are worth mentioning concerning the Convention. The first is the major role NGO’s

¹⁵³ Article 3(1).

¹⁵⁴ Ramsar Secretariat, *supra*, n. 135, 6.

¹⁵⁵ Bowman et al. (2010), *op.cit.* 419.

¹⁵⁶ Ramsar Secretariat, ‘Ramsar Handbooks and manual’, <http://www.ramsar.org/resources/ramsar-handbooks-and-manual>, accessed 15 June 2016.

¹⁵⁷ Article 3(2).

¹⁵⁸ Article 8.

¹⁵⁹ Ramsar Secretariat, Resolution IX.1 Annex A CoP9, ‘A Conceptual Framework for the wise use of wetlands and the maintenance of their ecological character’, 5-6.

¹⁶⁰ Article 6(2) .

¹⁶¹ Ramsar Secretariat, Recommendation 4.8 CoP4, ‘Change in ecological character of Ramsar sites’.

¹⁶² Article 4(1).

play in the functioning of the Convention. Parties are recommended to support and include nongovernmental organizations that try to conserve wetlands and parties are encouraged to consult those organizations, provide them with information and give them the chance to have a say in national wetland policies¹⁶³. To illustrate this involvement, at the last meeting of the Conference of the Parties, around 70 different national and international NGO's attended.

The second matter is the fact that four international organizations, the IUCN, BirdLife International, Wetlands International and the World Wide Fund for Nature are attributed the status of International Organization Partner of the Convention. Which briefly stated constitutes the right for them to participate as observers and advisors in all Ramsar matters¹⁶⁴. The involvement of the IUCN and the WWF especially could be vital for the rhinoceros in receiving adequate protection.

4.3 Ramsar and rhinoceroses

With the loss of habitat being one of the major threats to rhinoceroses worldwide¹⁶⁵, the Ramsar Convention is a legal instrument that can protect rhino habitat and make sure it is properly managed. Unlike CITES, where the individual rhino species are the subject and the legal regime directly protects rhinos, the Ramsar Convention is aimed at habitat preservation. This includes rhinoceros habitat and Table 1 shows which current Ramsar sites are important in that respect. Compared to the total amount of Ramsar sites on the List, the ones relevant to rhinos are not numerous, which is probably due to the fact that the Convention is primarily aimed at waterfowl and not all rhino species are wetland dwellers. Nevertheless some of the sites protected are vast in size and envelop multiple species within them, like the Okavango delta. Or sites are one of the few remaining refuges for an individual species of rhino, for example Indonesia's Berbak National Park and the Beeshazar site in Nepal, making them crucial in rhino conservation.

The relevance of the Ramsar Convention does differ per individual rhino species because they each face specific threats. As the Ramsar Convention mainly focuses on wetland habitat protection it does not concern itself with other habitats. For the protection of the white rhinoceros this means that Ramsar is less relevant, because the species generally resides in savannah-like territories¹⁶⁶. The Javan rhinoceroses, the few that remain, are not included in a Ramsar site and therefore do not enjoy any protection based on the Convention¹⁶⁷. The illegal trade in rhino horn and the associated poaching is not a subject of the Ramsar Convention even though for most rhino species this is one of the major threats¹⁶⁸. Threats to the Javan and Sumatran rhinoceros include their extremely low numbers, lack of genetic diversity and problems in reproduction due to their isolation¹⁶⁹, which are also issues the

¹⁶³ Ramsar Secretariat, Recommendation 5.6 CoP5, 'The role of nongovernmental organizations (NGOs) in the Ramsar Convention'.

¹⁶⁴ Ramsar Secretariat, Resolution VII.3 CoP7, 'Partnerships with international organizations'.

¹⁶⁵ R. Amin, K. Thomas, R.H. Emslie, T.J. Foose, N. Van Strien, 'An overview of the conservation status of and threats to rhinoceros species in the wild', in: 40 *International Zoo Yearbook*, no. 1, 2006, pp. 96-117.

¹⁶⁶ R. Emslie, *Ceratotherium simum*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/4185/0>, accessed 23 March 2016.

¹⁶⁷ See Table 4.

¹⁶⁸ Amin (2006), *supra*, n. 164.

¹⁶⁹ IUCN, 'Sumatran rhino likely to go extinct unless action is taken urgently', 22 September 2015, http://www.iucn.org/news_homepage/?21904/Sumatran-Rhino-likely-to-go-extinct-unless-action-is-taken-urgently-warns-IUCN, accessed 15 June 2016.

Convention does not address.

The general importance of the Ramsar Convention for rhinoceroses lies in the protection of their habitat, preventing a further loss thereof, possibly increasing the existing number of sites and wisely using those sites.

For the Indian or greater one-horned rhinoceros the Ramsar Convention carries a significant value, due its exclusive habituation of wetlands. This species of rhino was historically quite common in the riverine grasslands and wetlands around the Ganges, Indus and Brahmaputra rivers but nearly reached extinction at the turn of the 20th century mainly due to the loss of that riverine habitat¹⁷⁰. Wetlands were turned into agricultural areas to meet the demand of human population growth in the region, which not only reduced the size of their living area but also opened up the areas for poachers and sport hunters¹⁷¹. Conservation efforts throughout the century have brought the species back from the brink of extinction though and currently around 2,000 Indian rhinoceroses survive. They are divided over two populations, one in Kaziranga National Park in India and one in Royal Chitwan National Park in Nepal. The latter contains within it a Ramsar site called Beeshazar and Associated Lakes, which received this status partly due to the presence of the Indian rhinoceros¹⁷². The Ramsar Convention obliges its members to develop national strategies and management plans as to ensure their wise use¹⁷³ and Nepal has developed a site management plan for the Beeshazar and Associated Lakes site¹⁷⁴, thereby performing their Convention obligation.

The management plan aims to deal with the current threats to the biodiversity in the Beeshazar Lake area. Threats to the riverine habitats in the region are agriculture, urbanization, livestock grazing, the building of dams, irrigation¹⁷⁵, pollution and overexploitation of natural resources¹⁷⁶. The management plan makes recommendations to combat these threats and ensure that the site is 'used wisely' as the Convention obliges its members to do. Also illustrated in the plan's vision which is "the conservation and wise use of internationally important wetlands and their resources for achieving sustainable development", thereby paraphrasing the mission of the Ramsar Convention¹⁷⁷. Another threat to the biodiversity of the national parks are invasive alien species. Invasive plant species disrupt the local ecosystem, infest the grasslands and damage the nutrients of rhinoceroses. In Chitwan, introduced animal species are responsible for extinction of local species and the forest is infested with *Mikania micrantha*¹⁷⁸, a plant species which has a serious adverse effect on other plant species. By blocking the sunlight, smothering other plants and competing for water and nutrients it damages and kills other

¹⁷⁰ B.K. Talukdar, R. Emslie, R. Bist, S.S. Choudhury, S. Ellis, B.S. Bonal, M.C. Malakar, B.N. Talukdar, M. Barua, *Rhinoceros unicornis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/19496/0>, accessed 15 June 2016.

¹⁷¹ *Ibid.*

¹⁷² Ramsar Secretariat, Wise Use Resource: Nepal, 'Site Management Plan Beeshazar and Associated Lakes', 2014, <http://www.ramsar.org/sites/default/files/documents/library/beeshazar-and-associated-lakes-management-plan.pdf>, accessed 15 June 2016.

¹⁷³ Ramsar Secretariat, *supra*, n. 135.

¹⁷⁴ Ramsar Secretariat, *supra*, n. 171.

¹⁷⁵ B.P. Lahkar, B.K. Talukdar, P. Sarma, 'Invasive species in grassland habitat: an ecological threat to the greater one-horned rhino (*Rhinoceros unicornis*)', in: 49 *Pachyderm*, 2011, pp. 33-39.

¹⁷⁶ Ramsar Secretariat, *supra*, n. 171.

¹⁷⁷ Ramsar Secretariat, 'The Ramsar Convention and its Mission', <http://www.ramsar.org/about/the-ramsar-convention-and-its-mission>, accessed 15 June 2016.

¹⁷⁸ Ramsar Secretariat, *supra*, n. 171.

plants¹⁷⁹. Among the plant species that fall victim to this weed are species that serve as nutrition for rhinos. The loss of those plants therefore seriously degrades the habitat quality for rhinoceroses. The management plan states the problem should be studied and dealt with¹⁸⁰.

To see whether or not the recommendations made, have a significant effect goes beyond the scope of this study, but the basic finding can be made that the state of Nepal has implemented a Ramsar obligation that will probably benefit the conservation of Indian rhinoceroses.

Another example of such implementation can be seen in Botswana, where a management plan has been established for the Okavango delta¹⁸¹, a vast natural reserve and a Ramsar site, important to the black and white rhinoceros. The Convention obliged Botswana to establish such a management plan¹⁸², which *inter alia* aims at the long-term conservation of the wetland habitats and ecosystems of the area¹⁸³. The preservation of this enormous Ramsar site could prove vital for the survival of the black and white rhinoceros, with black rhino recently being reintroduced in the area¹⁸⁴.

Kenya's Lake Nakuru site has benefitted in another way from the Convention. The site has received funding from the Ramsar Small Grants Fund, which is a fund established by the Parties in 1990 to assist member states in projects that implement the mission of the Convention¹⁸⁵. The funds were used to conduct a study to find out how the income from tourism in the area could be improved. This would provide more funds for the preservation of the area, which was declared a rhino sanctuary in 1987¹⁸⁶, benefitting rhinos and other fauna in the reserve.

India has implemented the Ramsar Convention through its Ramsar Strategic Plan and has paid special attention to rhinoceroses in the process. One of the major activities important in this implementation program is the conservation of endangered and threatened species such as the rhinoceros¹⁸⁷.

4.4 Ramsar: an assessment from the rhino perspective

The Ramsar Convention was the first global conservation treaty to aim at habitat protection instead of species protection¹⁸⁸. Unlike CITES where specific species are listed in the Appendices, Ramsar works with a list of wetland sites which it protects. Ramsar is widely ratified and currently has 169 Contracting

¹⁷⁹ L. Sapkota, 'Ecology and management issues of *Mikania micrantha* in Chitwan National Park, Nepal', in: 17 *Banko Janakari*, no. 2, 2007, pp 27-39.

¹⁸⁰ Ramsar Secretariat, *supra*, n. 171.

¹⁸¹ Ramsar Secretariat, Wise Use Resource: Botswana, 'Okavango Delta Management Plan', 2008, http://www.ramsar.org/sites/default/files/documents/pdf/wurc/wurc_mgtplan_botswana_okavango.pdf, accessed 15 June 2016.

¹⁸² *Ibid.*

¹⁸³ *Ibid.*

¹⁸⁴ Wilderness Wildlife Trust, 'Botswana Rhino Reintroduction Project', <http://www.wildernesstrust.com/portfolio/botswana-rhino-relocation-and-reintroduction/>, accessed 15 June 2016.

¹⁸⁵ Ramsar Secretariat, 'Small Grants Fund', <http://www.ramsar.org/activity/small-grants-fund>, accessed 15 June 2016.

¹⁸⁶ Ramsar Secretariat, Ramsar Case Study on Tourism and Wetlands, 'Wetland Tourism: Kenya – Lake Nakuru', http://www.ramsar.org/sites/default/files/documents/pdf/case_studies_tourism/Kenya/Kenya_EN.pdf, accessed 15 June 2016.

¹⁸⁷ Ramsar Secretariat, CoP7 National Reports: India, 'Implementation of the Ramsar Convention in General, And of the Ramsar Strategic Plan 1997-2002 in particular, during the period since the National Report prepared in 1995 for Ramsar CoP6 and 30 June 1998', 1999.

¹⁸⁸ Bowman et al. (2010), *op.cit.* 449.

Parties¹⁸⁹. Except for the state of Angola, where the existence of a rhino population is dubious, all rhino range states are a party to the convention. So no rhino populations living in or near a wetland habitat are outside the possible scope of protection of the Convention. Being within the scope of protection would ideally mean for a population of rhinoceros, like that of the Indian rhinoceros in Nepal, that its habitat becomes a nature reserve, a management plan for the site is established, the habitat is protected, its ecological character is maintained and kept from adverse changes caused by humans. Unfortunately it is not always that straightforward and problems exist with the protection the Convention can offer, due to a lack of funding, lack of implementation, compliance and a lack of public awareness¹⁹⁰. Another possible gap in the protection is the possibility for states to delete a site from the list in case of 'urgent national interests', which could provide an escape route for states whenever they find suit¹⁹¹. Luckily for the rhinoceros, its presence in such a site can make sure deletion is not allowed¹⁹². In cases of Ramsar Convention violations where the rhinoceros is victimized, one should not rule out the option of the national judge as an enforcer. Ramsar's direct effect in domestic legal systems as a binding treaty is exemplified in a Dutch case concerning a Ramsar site on the island of Bonaire¹⁹³. In this case the Dutch Crown upheld the annulment by the Governor General of the Netherlands Antilles of the decision by the local authority of Bonaire to permit the building of a vacation resort adjacent to Het Lac Ramsar site, because such construction would violate several Ramsar provisions¹⁹⁴. Unfortunately, implementation levels of convention obligations are generally low¹⁹⁵ and more management plans for Ramsar sites need to be established. This would benefit the conservation of the rhino as an endangered species inhabiting Ramsar sites. The Beeshazar site in Nepal and Okavango site in Botswana have established such plans and this should benefit the habitat quality of those sites. For instance the Berbak National Park in Indonesia, could establish a management plan for the protection of its Sumatran rhinoceroses. A higher level of compliance would likely benefit the rhinoceros as would a higher number of rhino habitat listings. This of course has to concern wetland territories that meet the criteria put forward in Article 2(1)¹⁹⁶. It may be worthwhile for certain range states to research the possibility of listing more rhino habitats on the Ramsar list, as the presence of an endangered species could be reason enough to list a territory there.

¹⁸⁹ Ramsar Secretariat, *supra*, n. 140.

¹⁹⁰ Baakman (2011), *op.cit.* 151.

¹⁹¹ Article 2(5).

¹⁹² Ramsar Secretariat, *supra*, n. 149.

¹⁹³ Staatsblad, 'Besluit op beroep Bestuurscollege Eilandgebied Bonaire tegen besluit Gouverneur Ned. Antillen, 3 jan. 2007, inzake Crown Court Estate N.V.', 10 February 2007, <https://zoek.officielebekendmakingen.nl/stb-2007-347.html>, accessed 16 June 2016.

¹⁹⁴ J. M. Verschuuren, 'Ramsar Soft Law is Not Soft at All. Discussion of the 2007 Decision by the Netherlands Crown on the Lac Ramsar Site on the Island of Bonaire', in: 35 *Milieu en Recht*, no. 1, 2008, pp. 28-34.

¹⁹⁵ Baakman (2011), *op.cit.* 133.

¹⁹⁶ Article 2(1).

5. The World Heritage Convention

5.1 Convention Concerning the Protection of the World Cultural and Natural Heritage

The World Heritage Convention entered into force on the 17th of December 1975 after being adopted in 1972 at the United Nations Conference on the Environment in Stockholm¹⁹⁷. This occurred as the Convention prescribes, 3 months after Switzerland, the twentieth State, had become a party to the treaty¹⁹⁸. The Convention was a result of a growing notion within the international community that something like a global “common heritage” existed. The belief started to emerge in the 1960s that some manmade structures and natural phenomena were of such extraordinary value, that they deserved to be protected for future generations. Providing such protection was the responsibility of mankind as a whole and thus the entire international community¹⁹⁹. UNESCO, the United Nations Educational Scientific and Cultural Organization, recognized the need for an international instrument to govern such an enterprise of heritage protection and at its 1972 Conference a text was adopted that aimed to preserve natural and cultural heritage. The USA being the first state to ratify the Convention in 1973²⁰⁰, as of 15 August 2014²⁰¹, the number of states parties stands at 191, including all rhino range states except for Sudan. Much like the Ramsar Convention, the World Heritage Convention works with a list of designated sites. The list contains sites that are divided into three different categories which are, cultural sites, natural sites and a category of mixed sites, which features sites having both cultural and natural value.

The concept of natural heritage and its protection was new in international law at the time of the Convention’s concluding. Traditionally, conservation efforts were directed at specific flora and fauna or at natural areas in general, without the explicit underlying idea of preserving such matters for the future and future generations²⁰².

The World Heritage Convention is directed at natural properties which are of such ‘outstanding value’ that they deserve to be preserved for generations to come. This of course excludes natural properties that are of less than outstanding value from the scope of protection, making the protection regime of the Convention quite exclusive. This is however the approach of the Convention and the sites that do fall under its wings can benefit from its provisions. Based on the Red List of the IUCN, there are probably 12

¹⁹⁷ M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010), 451.

¹⁹⁸ Convention Concerning the Protection of the World Cultural and Natural Heritage (adopted 16 November 1972; entered into force 17 December 1975) 1037 UNTS 151 (World Heritage Convention), Article 33.

¹⁹⁹ Bowman, *supra* n. 196.

²⁰⁰ World Heritage Convention, ‘United States of America’, <http://whc.unesco.org/en/statesparties/us>, accessed 15 June 2016.

²⁰¹ World Heritage Convention, ‘States Parties Ratification Status’, <http://whc.unesco.org/en/statesparties/>, accessed 15 June 2016.

²⁰² Bowman et al. (2010), *op.cit.* 453.

sites which are important to the rhinoceros that currently enjoy the protection accompanying a listing on the World Heritage List²⁰³. This basically entails protection of the habitats of rhinoceroses.

World Heritage site	Country	Size (ha)	Rhino species
Okavango Delta	Botswana	2,023,590	Black rhinoceros – White rhinoceros
Kaziranga National Park	India	42,996	Indian rhinoceros
Manas Wildlife Sanctuary	India	39,100	Indian rhinoceros
Ujung Kulon National Park	Indonesia	78,525	Javan rhinoceros
Tropical Rainforest Heritage of Sumatra (ID)	Indonesia	2,595,124	Sumatran rhinoceros
Mount Kenya National Park	Kenya	202,334	Black rhinoceros
Kenya Lake System	Kenya	32,034	Black rhinoceros
Chitwan National Park	Nepal	93,200	Indian rhinoceros
iSimangaliso Wetland Park	South Africa	239,516	Black rhinoceros – White rhinoceros
Selous Game Reserve (ID)	Tanzania	5,120,000	Black rhinoceros
Serengeti National Park	Tanzania	1,476,300	Black rhinoceros
Ngorongoro Conservation Area	Tanzania	809,440	Black rhinoceros

Table 4. World Heritage sites important to rhinoceroses. <<http://www.iucnredlist.org>>.

5.2 The System

The system of the World Heritage Convention functions around the World Heritage List. As mentioned before, this List includes designated sites of natural and cultural heritage and also includes sites of a mixed character²⁰⁴. In this study the focus will be placed on the natural heritage aspect, because that is the one important to the rhinoceros.

States party to the Convention recognize that the obligation of ensuring the identification, protection, conservation, presentation and transmission to future generations²⁰⁵ of natural heritage on its territory lies primarily with that state. An obligation the Australian High Court considered to entail a justiciable legal duty on states parties to do everything within their power to protect their world heritage sites, giving the Convention direct effect in Australia's domestic jurisdiction²⁰⁶. Linked to that obligation is the duty to refrain from actions which might endanger natural heritage on the territory of another state²⁰⁷ and the general notion that natural heritage is world heritage and therefore the international community has to cooperate in its protection²⁰⁸. Furthermore, states are obliged to assist other states in complying with those duties if another state requests such assistance²⁰⁹. Article 7 of the Convention describes the international protection of heritage which the Convention is aimed at, as a "system of international co-operation and assistance designed to support states parties to the Convention in their

²⁰³ See Table 2.

²⁰⁴ World Heritage Committee, 'Operational Guidelines for the Implementation of the World Heritage Convention', 2015, para. 46, p. 11.

²⁰⁵ World Heritage Convention, Article 4.

²⁰⁶ *Commonwealth of Australia v State of Tasmania* (1983) 46 ALR 625; 68 ILR 266.

²⁰⁷ Article 6(3).

²⁰⁸ Article 6(1).

²⁰⁹ Article 6(2).

efforts to conserve and identify that heritage”²¹⁰.

What is to be considered natural heritage is defined in article 2 of the Convention as:

“natural features consisting of physical and biological formations or groups of such formations, which are of Outstanding Universal Value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of Outstanding Universal Value from the point of view of science or conservation; natural sites or precisely delineated natural areas of Outstanding Universal Value from the point of view of science, conservation or natural beauty”²¹¹.

The concept of Outstanding Universal Value is key in the designation of sites as natural heritage. What amounts to such a value is not elaborated upon in the article, but in the Operational Guidelines of the Convention, which have been revised by the World Heritage Committee in 2015²¹². These guidelines provide a definition of ‘outstanding universal value’, meaning a natural significance which is that exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity²¹³. The fact that a site has such value, makes it a priority to protect for the whole international community. It is important to note that the duty to protect natural heritage of outstanding universal value, goes further than merely the sites on the List and extends to all natural heritage on the territory of a State²¹⁴. This is also mentioned in Article 12 of the Convention²¹⁵. States have an obligation under the treaty to protect all the natural and cultural heritage on their territory and should include those sites of outstanding universal value on the World Heritage List.

The Convention text states the three most important institutional bodies: the World Heritage Committee, the General Assembly²¹⁶ and the Secretariat²¹⁷ or World Heritage Center as it is now called²¹⁸ and also the three most important advisory bodies, the IUCN, the International Centre for the Study of the Preservation and Restoration of Cultural Property and the International Council of Monuments and Sites²¹⁹.

The General Assembly is a body in which all states parties are represented, that meets once every two years and of which the main tasks are to elect new members in the World Heritage Committee and to establish the amount of financial contribution each party has to pay every two years²²⁰. The World Heritage Centre is in charge of the practical matters related to the Convention, such as the organizing of the General Assembly and Committee meetings, the implementation of decisions of the World Heritage Committee and resolutions of the General Assembly and reporting on their execution and the organization of Periodic Reporting²²¹.

²¹⁰ Article 7.

²¹¹ Article 2.

²¹² World Heritage Committee, Decision 39 COM 11, ‘Revision of the Operational Guidelines’, 2015.

²¹³ World Heritage Committee, *supra*, n. 203, para. 49.

²¹⁴ Bowman et al. (2010), *op.cit.* 454.

²¹⁵ Article 12.

²¹⁶ Article 8(1).

²¹⁷ Article 14(1).

²¹⁸ K. Baakman, *Testing times: the effectiveness of five international biodiversity-related conventions*, (1st ed. Wolf Legal Publishers Utrecht 2011), 168.

²¹⁹ Article 13(7).

²²⁰ Article 16(1).

²²¹ World Heritage Committee, *supra*, n. 203, para. 28.

The most important body within the institutional framework is however the World Heritage Committee. This 21-member body decides on all matters concerning the implementation of the convention and meets once a year²²². Although this is a treaty body and its decisions are not legally binding, they are authoritative in interpreting the binding obligations states parties have under the Convention itself²²³. These decisions should therefore not be taken lightly by states parties as is stated in the Operational Guidelines: “any appraisals made on its behalf must be thoroughly and responsibly carried out”²²⁴.

The Guidelines go on by stating the main functions of the Committee, which are to: identify the sites that should be included on the List, examine the state of conservation of listed sites, decide on which properties are to be inscribed on the List of World Heritage in Danger, decide whether a property should be deleted from the World Heritage List, decide on the procedure regarding International Assistance, determine how the resources of the World Heritage Fund can be used and increased, submit a report on its activities every two years, review and evaluate the implementation of the Convention and to revise and adopt the Operational Guidelines²²⁵. In this substantial amount of tasks the Committee is supported by the IUCN in relation to natural heritage matters. The role of this advisory body is: the evaluation of properties nominated for inscription on the World Heritage List, monitoring the state of conservation of World Heritage natural properties, reviewing requests for International Assistance submitted by states parties and providing input and support for capacity-building activities²²⁶.

The Convention has several monitoring processes in place such as the Reactive Monitoring system²²⁷, the Periodic Reporting system²²⁸ and the State of Conservation system²²⁹. Under the Periodic Reporting system states have an obligation to report to the World Heritage Committee on their application of the Convention, who in then in turn submits these reports to the General Conference of the UNESCO²³⁰, the State of Conservation system is the database of all reports made by the Secretariat and Advisory Bodies such as the IUCN and Reactive Monitoring is the reporting on properties under threat²³¹. Through these systems the World Heritage Committee remains aware of the status of rhinoceros habitats. However to this day, only two complete Periodic Reporting Cycles have been completed, so the system does function quite slowly.

Noteworthy is also the possible deletion of sites from the List. According to the Operational Guidelines the Committee can delete sites in cases where it has lost the characteristics of outstanding universal value for which it was initially listed²³². In such a situation the Secretariat should be informed²³³ and the

²²² World Heritage Committee, *supra*, n. 203, para. 19.

²²³ Vienna Convention on the Law of Treaties (adopted 23 May 1969; entered into force 27 January 1980) 1155 UNTS 333 (Vienna Convention), Article 26.

²²⁴ World Heritage Committee, *supra*, n. 203, para. 23.

²²⁵ World Heritage Committee, *supra*, n. 203, para. 24.

²²⁶ World Heritage Committee, *supra*, n. 203, para. 37.

²²⁷ World Heritage Convention, ‘Reactive Monitoring Process’, <http://whc.unesco.org/en/reactive-monitoring/>, accessed 15 June 2016.

²²⁸ World Heritage Convention, ‘Periodic Reporting’, <http://whc.unesco.org/en/periodicreporting/>, accessed 15 June 2016.

²²⁹ World Heritage Convention, ‘State of Conservation Information System’, <http://whc.unesco.org/en/soc/>, accessed 15 June 2016.

²³⁰ Article 29.

²³¹ World Heritage Committee, *supra*, n. 203, para. 169.

²³² World Heritage Committee, *supra*, n. 203, para. 192.

²³³ World Heritage Committee, *supra*, n. 203, para. 193.

state party should do everything in its power to prevent the delisting²³⁴. Regarding natural heritage this has only happened once. In 2007 the Committee decided to delist the Arabian Oryx Sanctuary in Oman because the population of this rare breed of antelope had diminished to a number no longer viable for survival²³⁵. Furthermore, Oman was planning to reduce the habitat size by 90%, meaning no significant World Heritage site would remain. Oman violated its treaty obligations concerning this site and as a consequence the site was deleted.

In describing the basic system of the World Heritage Convention, two more concepts need to be mentioned, which are the World Heritage List in Danger and the Tentative Lists.

Tentative lists are the lists mentioned in Article 11(1) of the Convention and basically amount to a list a state party is obliged to compose containing all of the cultural and natural heritage present on its territory. Sites thereon are to be suitable for inclusion on the World Heritage List²³⁶ and a site has to have been on a Tentative List before it can be nominated for inclusion on the World Heritage List²³⁷. World Heritage sites are to be protected, maintained and preserved by the states that harbor them²³⁸, but occasionally states fail to adequately do that. When a site included on the World Heritage List is at risk or endangered the Committee may place it on the List of World Heritage in Danger²³⁹, as mentioned in article 11(4) of the Convention. This means that major operations are necessary for its conservation and that for such major operations assistance has been requested by the state concerned²⁴⁰. The list should also include an estimate of the required costs of the operations²⁴¹. The Committee is free to add sites to the Danger List whenever it deems this to be necessary²⁴². The Operational Guidelines give criteria as to when a site can be considered endangered. With regard to natural heritage sites this could be the case when a site is faced with “a serious decline in the population of the endangered species or the other species of Outstanding Universal Value for which the property was legally established to protect, either by natural factors such as disease or by human-made factors such as poaching”. So the presence of a population of an endangered rhino species can qualify a property for listing on the World Heritage list and once listed, the decline of such a population can consequently provide for the site being transferred to the List of World Heritage in Danger.

Briefly put, the Convention works as follows for a property which is important to rhinoceroses. The state party in which the relevant rhino habitat is situated lists the area on its Tentative List and subsequently nominates it for inclusion on the World Heritage List. The World Heritage Committee then decides on the property’s Outstanding Universal Value, which considering the presence of an endangered rhino species population will probably be deemed as sufficient. The site is then listed on the World Heritage List and then benefits from its protective regime.

What this kind of protection means is elaborated upon in the Operational Guidelines. The Outstanding Universal Value of the site has to be maintained and regular monitoring and reporting systems are in

²³⁴ World Heritage Committee, *supra*, n. 203, para. 170.

²³⁵ World Heritage Committee, Decision 31 COM 7B.11, ‘State of conservation of World Heritage properties – Arabian Oryx Sanctuary’, 2007.

²³⁶ Bowman et al. (2010), *op.cit.* 470.

²³⁷ World Heritage Committee, *supra*, n. 203, para. 63.

²³⁸ Article 4.

²³⁹ World Heritage Committee, *supra*, n. 203, para. 177.

²⁴⁰ Article 11(4).

²⁴¹ *Ibid.*

²⁴² *Ibid.*

place through the Convention to ensure that²⁴³. Adequate long-term legislative, regulatory, institutional and/or traditional protection of the site is required from parties at all levels of government²⁴⁴. The boundaries of sites should thereby be explicitly demarcated²⁴⁵. This is the theoretical framework in which rhino habitats potentially enjoy protection from the World Heritage Convention. How the functioning of the treaty relates to rhinos is explained hereafter.

5.3 The World Heritage Convention and the rhinoceros

The World Heritage Committee functions through the issuing of decisions, which must be taken by a two-thirds majority of its voting and present members²⁴⁶. With regard to World Heritage Sites which are or could be important to the rhinoceros, many decisions have been taken. Decisions explicitly mentioning the rhino, currently number around 70 since the first was taken in 1983²⁴⁷. These decisions differ quite a lot in form and subject and to elaborate on all of them individually would go beyond the scope of this study. To illustrate the relevance they can have for rhinoceroses and what kinds of decisions are taken, several examples will be given. In most decisions states are urged or requested to perform a certain task. This is for instance the case in a decision regarding Chitwan National Park in Nepal, taken at the 39th Session of the Committee in 2015²⁴⁸. The Committee was concerned that the proposed construction of both a highway and a railway would seriously fragment the habitat of *inter alia* the Indian rhinoceros. It therefore requests Nepal to conduct an Environmental Impact Assessment (EIA) on the impact this would have on the site's Outstanding Universal Value, of which the presence of the Indian rhinoceros is a key factor. Furthermore it requests Nepal to invite an IUCN mission to assess the situation, to provide a report on the status of rhino poaching and to provide an updated report on the conservation status²⁴⁹.

In another decision by the Committee in 2015 directed at India, it expresses its concern about the high risk of the extinction of the Indian rhino in the Manas Wildlife Sanctuary²⁵⁰ and encourages India to increase its efforts to combat poaching. Furthermore India is requested to also conduct an EIA and to undertake a study into the effective management of grassland, which could benefit the quality of Indian rhino habitat.

Deciding on whether or not to add a site to the World Heritage List is one of the tasks of the World Heritage Committee and the presence of a rhino population can be a factor in such a decision. This is for example the case in the 2011 Committee decision to list the Okavango Delta in Botswana as a World Heritage Site²⁵¹. The fact that white and black rhinoceros are present in the region is one of the reasons the Committee decided it fulfilled the listing criterion (x)²⁵², concerning the presence of threatened species.

Committee decisions can also contribute to the reintroduction of rhinoceroses to places where their

²⁴³ World Heritage Committee, *supra*, n. 203, para. 96.

²⁴⁴ World Heritage Committee, *supra*, n. 203, para. 97.

²⁴⁵ World Heritage Committee, *supra*, n. 203, para. 99.

²⁴⁶ Article 13(8).

²⁴⁷ World Heritage Convention, <http://www.unesco.org>, accessed 16 June 2016.

²⁴⁸ World Heritage Committee, Decision 39 COM 7B.15, 'Chitwan National Park (Nepal) (N284)', 2015.

²⁴⁹ *Ibid.*

²⁵⁰ World Heritage Committee, Decision 39 COM 7B.11, 'Manas Wildlife Sanctuary (India) (N338)', 2015.

²⁵¹ World Heritage Committee, Decision 38 COM 8B.5, 'Okavango Delta (Botswana)', 2014.

²⁵² World Heritage Committee, *supra*, n. 203, para. 77.

presence has gone lost. In a 2014 Committee Decision, Zimbabwe was requested to conduct a feasibility study for a possible reintroduction program of black rhinoceroses, which disappeared from the Mana Pools National Park, Sapi and Chewore Safari Areas property due to poaching²⁵³. The relocation and restoration of species can also be the subject of a request, as a request to Indonesia to assess the feasibility of the relocation and restoration of the Sumatran rhinoceros shows²⁵⁴.

The Committee can further decide on the extension of a certain natural heritage site. In the case of a 2013 decision regarding the Mount Kenya National Park site this was partly done on the basis of a rhino presence nearby the original site. Through the extension of the property a piece of rhino habitat was added to the World Heritage Site²⁵⁵.

Financial support for rhino related projects has also been one of the subjects of Committee decisions. In a decision aimed at Indonesia regarding the Tropical Rainforest Heritage of Sumatra, the Committee found that Australia was planning to rescind a pledge of 3 million Australian dollars to benefit the conservation of the Sumatran rhinoceros and consequently requested Australia to desist from doing this and thus to continue its financial support.

In one of its first decisions relating to rhinoceroses the Committee in 1983 at its 7th session, decided to allocate \$40,000 to the Republic of Zaire to assist that state in protecting the fauna of Garamba National Park World Heritage Site and in particular the white rhinoceros population against poaching²⁵⁶. For rhinos these examples show that rhino range States can request financial assistance from the World Heritage Committee in combatting rhino survival threats.

As stated before, generally speaking decisions of the Committee regarding the rhinoceros entail a request, encouragement or urging of a state party to tackle certain issues. In several decisions the Committee recognizes the global increase in rhino poaching²⁵⁷ and calls upon states which are transit and destination countries to support the addressed state of that particular decision to halt the illegal trade in wildlife and its derivatives, in particular through the implementation of CITES²⁵⁸. These are quite general encouragements to states parties of which the practical consequences are not always easy to discern.

Committee decisions can have a practical effect however, which can be clearly seen in past decisions regarding Garamba National Park in the Democratic Republic of the Congo. In 1984 the Committee decided to list this site, which was part of the Republic of Zaire at that time, on the List of World Heritage in Danger due to the critically endangered population of northern white rhinoceros in the park. No more than 15 individuals remained and this was reason enough to list the national park on the Danger List²⁵⁹. To try and restore this population a joint project of the WWF, the Frankfurt Zoological Society and the Committee was created and led to a promising recovery of the northern white

²⁵³ World Heritage Committee, Decision 38 COM 7B.97, 'Mana Pools National Park, Sapi and Chewore Safari Areas (N 302) (Zimbabwe)', 2014.

²⁵⁴ World Heritage Committee, Decision 33 COM 7B.15, 'Tropical Rainforest Heritage of Sumatra (Indonesia) (N1167)', 2009.

²⁵⁵ World Heritage Committee, Decision 37 COM 8B.9, 'Extension of properties already inscribed on the World Heritage List: Mount Kenya National Park/Natural Forest', 2013.

²⁵⁶ World Heritage Committee, Decision CONF 021 V.19, 'Request for emergency assistance', 1983.

²⁵⁷ World Heritage Committee, Decision 37 COM 7, 'Emerging trends and general issues', 2013.

²⁵⁸ World Heritage Committee, Decision 38 COM 7B.95, 'Selous Game Reserve (United Republic of Tanzania) (N199bis)', 2014.

²⁵⁹ World Heritage Committee, Decision CONF 004 X.26-27, 'Inscriptions on the List of World Heritage in Danger', 1984.

rhinoceroses in 1989²⁶⁰. In 1992 the population had increased to 32 individuals leading the Committee to recommend the removal of the site from the List of World Heritage in Danger²⁶¹. The removal was concluded by a decision of the Committee in 1992²⁶². This can be considered a modest success in Committee activities regarding the protection of rhinoceroses. Sadly the upward population trend could not be maintained and the site was listed on the List of World Heritage in Danger again in 1996²⁶³, due to the poaching of several northern white rhinos, and has remained there up until the present day. Despite several efforts of the Committee over the years, of which the paying of \$30,000 to salary 238 people working in anti-poaching operations in 1999 is a practical example²⁶⁴, the northern white rhinoceros has sadly gone extinct in the park. Nevertheless, the process of first listing the site on the Danger List, the subsequent recovery project which led to the restoring of the population and its delisting 1992 can be seen as an example of what the Committee can achieve through its decisions.

Tentative List Site	Country	Notes	Rhino species
Aberdare Mountains	Kenya	-	Black rhinoceros
Cat Tien National Park	Vietnam	Javan rhinoceros only recently gone extinct, has reintroduction potential	Javan rhinoceros
Lake Nakuru	Kenya	Rhino sanctuary since 1983	Black rhinoceros – White Rhinoceros
Mapungubwe Cultural Landscape	Botswana-South Africa-Zimbabwe	Holds black and white rhinoceros potential – transboundary listing	Black rhinoceros – White rhinoceros
Royal Manas National Park	Bhutan	-	Indian rhinoceros
The African Great Rift Valley – The Maasai Mara	Kenya	-	Black rhinoceros
Meru Conservation Area	Kenya	-	Black rhinoceros – White rhinoceros
Tsavo Parks and Chyulu Hills Complex	Kenya	Includes rhino sanctuary	Black rhinoceros

Table 5. Tentative List Sites and their importance to rhinoceroses. <www.whc.org>.

5.4 The World Heritage Convention: an assessment from the rhino perspective

The World Heritage Convention is not specifically aimed at wildlife conservation, let alone rhino conservation. Its scope of protection focuses on the preservation of natural areas and cultural phenomena of outstanding value. Its protection is restricted to a list of extraordinary natural or cultural sites, giving it a rather exclusive character. Within this narrow perspective there is however a place for the rhinoceros, who as an endangered species itself can be one of the contributing factors to a possible listing of a natural heritage site. For rhinoceroses inhabiting a listed natural heritage site, this means that their living area is subject to protection by the State, by the international community and by the World Heritage Committee. The different monitoring processes of the Convention are to make sure of this.

²⁶⁰ World Heritage Committee, Decision CONF 004 XV.D, ‘List of World Heritage in Danger: Garamba National Park (Zaire)’, 1989.

²⁶¹ World Heritage Committee, Decision CONF 003 V.31, ‘Garamba National Park (Zaire)’, 1992.

²⁶² World Heritage Committee, Decision CONF 002 VIII, ‘SOC: Garamba National Park (Zaire)’, 1992.

²⁶³ World Heritage Committee, Decision CONF 201 VII.D.37, ‘SOC: Garamba National Park (Zaire)’, 1996.

²⁶⁴ World Heritage Committee, Decision CONF 209 X.A.4, ‘SOC: Virunga National Park, Garamba National Park, Kahuzi Biega National Park, Okapi Wildlife Reserve (Democratic Republic of the Congo DRC)’, 1999.

Another noteworthy aspect is the Convention's language. The wording the Convention uses to describe State obligations with regard to their natural heritage is quite strong²⁶⁵, especially in relation to that of for instance the Ramsar Convention²⁶⁶. In that sense a World Heritage listing of a rhino habitat should offer quite rigorous protection to rhino species. What this means in practice remains to be seen, but it is evident that the protection the Convention expects states parties to provide is quite formidable. The Convention's high level of ratification²⁶⁷ and the level of prestige a site and state receives from being on the List, is another strong point. World Heritage sites usually feature quite prominently on the conservation agenda of states and rhinoceros habitats being placed thereon will certainly enjoy some added publicity or priority in relation to sites which are not listed. From the perspective of rhinoceroses it is therefore important to add more sites on Tentative Lists to the World Heritage List. Several examples of such sites can be seen in Table 5. Kenya has 5 sites on its Tentative List that are relevant to the rhinoceros and should make it a priority to list them on the World Heritage List. The Royal Manas National Park in Bhutan is an important area for the threatened Indian rhinoceros which could benefit from a transfer to the World Heritage List. Cat Tien National Park was one of the last remaining strongholds of the Javan rhinoceros²⁶⁸. In the future this habitat could perhaps serve as a place for the reintroduction and recovery of the species. Providing it with the highest level of protection under the World Heritage Convention could prove vital, and its nomination for the World Heritage List should be a priority for Vietnam.

The World Heritage Committee has shown in its decisions that sites can benefit in practice from a listing. It was willing to provide financial assistance on several occasions, contributed to anti-poaching operations and urged states to take several protective measures. The past example of the northern white rhinoceros population in Garamba National Park has shown successes, albeit small ones, can be achieved by the Committee.

With the only enforcement mechanisms being the possible deletion of sites and the consequent negative publicity for a state party or the placing of sites on the World Heritage List in Danger the corrective character of the Convention remains rather weak. The Convention itself has binding force under international law²⁶⁹ and decisions by the Committee and the Operational Guidelines have an authoritative soft law character²⁷⁰ but as in many environmental conventions a strong enforcement mechanism is missing. State willingness to live up to Convention obligations is again key here. Other ways of enforcing the treaty or protecting sites from violations might exist though. Possible standing before the International Court of Justice for violations of the Convention can be a road to take²⁷¹ and reference to World Heritage Convention obligations has already been made in jurisprudence of the ICJ²⁷². Holding States accountable for not protecting a rhino population present in one of their World Heritage sites on the basis of a violation of their Convention obligations to protect their natural

²⁶⁵ Article 4.

²⁶⁶ Article 3(1).

²⁶⁷ World Heritage Convention, *supra*, n. 200.

²⁶⁸ M. Kinver, 'Javan rhino 'now extinct in Vietnam'', 25 October 2011, <http://www.bbc.com/news/science-environment-15430787>, accessed 15 June 2016.

²⁶⁹ Vienna Convention, Article 26.

²⁷⁰ Baakman (2011), *op.cit.* 180.

²⁷¹ S. A. Green Martinez, 'Locus Standi Before the International Court of Justice for Violations of the World Heritage Convention', in: 5 *Transnational Dispute Management*, 2013.

²⁷² A. Chechi, 'The 2013 Judgment of the ICJ in the *Temple of Preah Vihear* Case and the Protection of World Cultural Heritage Sites in Wartime', in: 6 *Asian Journal of International Law*, no. 2, 2016, pp. 353 – 378.

heritage may be possible under this line of reasoning.

The International Criminal Court has recently started a case against a Malinese jihadist for his alleged destruction of cultural heritage²⁷³. This could possibly set a precedent for individual criminal responsibility for damaging world heritage²⁷⁴. Rhino poachers could perhaps be individually held accountable for the destruction of natural heritage at the ICC in the future. It is too soon to make definitive statements however and more research into the matter is needed²⁷⁵.

As the *Tasmanian Dam* case²⁷⁶ of Australia's High Court shows, national judges should also not be ruled out in the application of World Heritage Convention provisions. States or local authorities can be summoned to uphold their international obligations under national legal systems as well. It is for instance up to NGO's or private citizens to pursue such a domestic route. Outcomes and possibilities differ among states, *inter alia* depending on the applicability of a monist or dualist system. Nonetheless, perhaps possibilities exist in the domestic sphere to enforce rhinoceros protection provided by the World Heritage Convention.

The protection the World Heritage Convention offers rhinos is strong, with regard to their habitat, it requires states to do the utmost to protect those habitats. For the rhino habitats which are not or not yet on the List however the Convention only provides for a quite general obligation for States to protect the natural heritage on their territory²⁷⁷.

From a rhinoceros perspective, another discussion to keep an eye on is that concerning the concept of "World Heritage Species", basically meaning the protection of individual species in the same manner as protecting natural cultural heritage sites²⁷⁸. Either through introducing a novel legal instrument or adding to the current World Heritage Convention. As an iconic species the rhinoceros could be eligible for receiving such a status, should it ever come so far.

²⁷³ International Criminal Court, 'Al Mahdi Case', <https://www.icc-cpi.int/mali/al-mahdi>, accessed 15 June 2016.

²⁷⁴ S.A. Green Martinez, 'Destruction of Cultural Heritage in Northern Mali: A Crime Against Humanity?', in: 13 *Journal of International Criminal Justice*, no. 5, 2015, pp. 1073-1097.

²⁷⁵ M. Lostal, 'Syria's World Cultural Heritage and Individual Criminal Responsibility', in: 2015 *International Review of Law*, no. 3, 2015, pp. 1-17.

²⁷⁶ *Tasmanian Dam case*, *supra*, n. 205.

²⁷⁷ Article 4.

²⁷⁸ C. Wold, 'World Heritage Species: A New Legal Approach to Conservation', in: 20 *Georgetown International Environmental Law Review*, no. 3, 2008, pp. 337-396.

6. The Bonn Convention on Migratory Species

6.1 The Bonn Convention

The Bonn Convention is a legally binding international convention²⁷⁹ aimed at the protection of migratory wildlife species. Due to a serious decline in numbers of several of those migratory species in the 1970's the international community started to realize some kind of instrument was needed to prevent further loss of wildlife²⁸⁰. Because migratory species traverse multiple national borders in their migrations and do not stick to specific state territories, an international instrument was required to protect them. The 1972 Stockholm Conference on the Human Environment can be considered the starting point of the instruments' drafting process, as Recommendation 32 of the Action Plan recommended that: "Governments give attention to the need to enact international conventions and treaties to protect species inhabiting international waters or those which migrate from one country to another"²⁸¹. It continues by recommending a "broadly based convention" and that "a working group should be set up" to establish such a convention²⁸². The German government then took it upon themselves in 1974 to create a draft convention which after several years of debate was finished in Bonn in 1979. The Bonn Convention or Convention on the Conservation of Migratory Species of Wild Animals (CMS) entered into force on November 1, 1983. The initial participation levels of the Convention were low, but have been going up over the years. Of the five conventions dealt with in this study its number of ratifications is however the lowest, with the current number of parties standing at 123²⁸³ and with major states such as the USA, Russia, Canada and China being absent as parties. Only 10 out of 20 rhino range states are a party to the Convention.

The current Strategic Plan of the Bonn Convention states its mission, which is "to promote actions to ensure the favorable conservation status of migratory species and their habitats, and to ensure the ecological integrity, connectivity and resilience of migration systems"²⁸⁴. Rhinoceroses are not migratory species in the classical sense of the word and are therefore not part of the species the Convention aims at protecting. The Convention is potentially relevant to the rhino though, as is shown further on in this study.

²⁷⁹ Vienna Convention on the Law of Treaties (adopted 23 May 1969; entered into force 27 January 1980) 1155 UNTS 333 (Vienna Convention), Article 26.

²⁸⁰ R. Caddell, 'International Law and the Protection of Migratory Wildlife: An Appraisal of Twenty-Five Years of the Bonn Convention', in: 16, *Colorado Journal of International Environmental Law and Policy*, no. 1, 2005, pp. 113-256.

²⁸¹ United Nations, A/CONF.48/14/Rev.1, 'Report of the United Nations Conference on the Human Environment', 1972, 212.

²⁸² *Ibid.*

²⁸³ Bonn Convention Secretariat, 'Parties and Range States', <http://www.cms.int/en/parties-range-states>, accessed 15 June 2016.

²⁸⁴ Bonn Convention Secretariat, Resolution 11.2 CoP 11, 'Strategic Plan for Migratory Species 2015-2023', 2014.

6.1.1 The System

To achieve its mission, the Convention system uses an Appendix system of species, similar to CITES but with only two appendices. Appendix I supplies the highest level of protection and contains migratory species which are endangered²⁸⁵ throughout all or a significant portion of their range²⁸⁶. Appendix II lists migratory species “which have an unfavorable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement”²⁸⁷. The Convention does not preclude the listing of species on both Appendices at the same time²⁸⁸. None of the five rhinoceros species is included on the Appendices. Obligations for states parties concerning these Appendices are laid down in Article II and amount *inter alia* to acknowledging the importance of conservation and to take action to this end whenever possible and appropriate²⁸⁹ and the need to take action to avoid any migratory species becoming endangered²⁹⁰. Furthermore Parties “should promote, co-operate in and support research relating to migratory species; shall endeavor to provide immediate protection for migratory species included in Appendix I; and shall endeavor to conclude AGREEMENTS covering the conservation and management of migratory species included in Appendix II”²⁹¹.

Migratory species are defined in the Convention as: “the entire population or any geographically separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries”²⁹². This definition allows flexibility for States to protect an individual population of a species or a subspecies if necessary and appropriate²⁹³. The concept of ‘migratory’ has also proven to be quite flexible as the listing of the mountain gorilla (*Gorilla berengei berengei*) in Appendix I shows. Although this species moves around within its territory thereby regularly crossing jurisdictional boundaries, its movements can hardly be called ‘cyclical’ or ‘predictable’²⁹⁴. The CMS applies an inclusive policy in this regard which tends to focus more on *transboundary* species conservation rather than *migratory* species conservation²⁹⁵.

Article I requires a species to be endangered for listing in Appendix I. This means that a species is facing a very high risk of extinction in the wild in the near future²⁹⁶. The IUCN Red List of Threatened Animals is to be followed as much as possible in attributing a species with such a status²⁹⁷. Appendix II shall contain

²⁸⁵ Convention on the Conservation of Migratory Species of Wild Animals (adopted 23 June 1979; entered into force 1 November 1983) 1651 UNTS 333 (Bonn Convention), Article III.

²⁸⁶ Bonn Convention, Article I.

²⁸⁷ Article IV (1).

²⁸⁸ Article IV (2).

²⁸⁹ Article II (1).

²⁹⁰ Article II (2).

²⁹¹ Article II (3).

²⁹² Article I (1)(a).

²⁹³ M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010), 539.

²⁹⁴ Bowman et al. (2010), op.cit. 540.

²⁹⁵ A. Trouwborst, ‘Transboundary Wildlife Conservation in A Changing Climate: Adaptation of the Bonn Convention on Migratory Species and Its Daughter Instruments to Climate Change’, in: 4 *Diversity*, no. 3, 2012, pp. 259-300.

²⁹⁶ Bowman et al. (2010), op.cit. 541.

²⁹⁷ *Ibid.*

migratory species which have an “unfavorable” conservation status. Such a status is reached if the conditions mentioned in Article I 1(c) are not met²⁹⁸.

The Convention is aimed at the range states of migratory species, which are defined as “any state(.....) that exercises jurisdiction over any part of the range of that migratory species, or a State, flag vessels of which are engaged outside national jurisdictional limits in taking that migratory species”²⁹⁹.

What are the obligations the Convention imposes on those range states? Article VI of the Convention provides for the obligation of range States to inform the Secretariat at least six months before another meeting of the Conference of the Parties on the ways they have implemented or plan to implement the Convention for the listed species of whom they are range States³⁰⁰. The obligations set out in Article II have already been mentioned and apply to all migratory species and not merely those in the Appendices³⁰¹. The most important obligations for range States are set out in Article III:

Parties that are Range States of a migratory species listed in Appendix I shall endeavor:

a) to conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction;

b) to prevent, remove, compensate for or minimize, as appropriate, the adverse effects of activities or obstacles that seriously impede or prevent the migration of the species; and

c) to the extent feasible and appropriate, to prevent, reduce or control factors that are endangering or are likely to further endanger the species, including strictly controlling the introduction of, or controlling or eliminating, already introduced exotic species.³⁰²

At first sight these seem like very heavy and far-reaching obligations upon states, but a closer read put this into perspective. The first obligation is to be exercised when ‘feasible and appropriate’ and it is up to the states to decide when this is the case. Further, states are required to ‘endeavor’ to perform these tasks which can mean different things and the actual strictness of the obligation remains to be decided³⁰³. Another general obligation mentioned in Article III is that:

Parties that are Range States of a migratory species listed in Appendix I shall prohibit the taking of animals belonging to such species. Exceptions may be made to this prohibition only if:

a) the taking is for scientific purposes;

b) the taking is for the purpose of enhancing the propagation or survival of the affected species;

c) the taking is to accommodate the needs of traditional subsistence users of such species; or

d) extraordinary circumstances so require; provided that such exceptions are precise as to content and limited in space and time. Such taking should not operate to the disadvantage of the species.³⁰⁴

²⁹⁸ Article I (1)(c).

²⁹⁹ Article I (1)(h).

³⁰⁰ Article VI (3).

³⁰¹ Bowman et al. (2010), op.cit. 544.

³⁰² Article III (4).

³⁰³ Caddell, *supra*, n. 279, 117.

³⁰⁴ Article III (5).

A general prohibition on the taking of endangered migratory species, but with a few possible exceptions. 'Taking' is defined in Article I as meaning "hunting, fishing, capturing, harassing, deliberate killing or attempting to engage in any such conduct"³⁰⁵.

Whether or not obligations mentioned here are justiciable remains to be seen. The only court which has ever expressed its opinion on the matter is the Australian High Court in its case of *Australia v. Tasmania*³⁰⁶,

in which it ruled that a similar wording in article 5 of the World Heritage Convention amounting to an obligation to 'endeavor' established a justiciable obligation upon a State party. The meaning of this judgment for international law however is little.

Appendix II species, which are the species described as having an 'unfavorable conservation status', also enjoy a certain level of protection. The number of species on Appendix II is much lengthier, given the broad definition for inclusion. Range states of species on this Appendix "shall endeavor to conclude AGREEMENTS where these should benefit the species and should give priority to those species in an unfavorable conservation status"³⁰⁷. The intention is that these AGREEMENTS should constitute formal treaties with binding effect in international law³⁰⁸ and four of them have been adopted to date³⁰⁹. In article V of the Convention the requirements for such instruments are laid down³¹⁰. Additionally, states parties are "encouraged to take action with a view to concluding agreements for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdiction boundaries"³¹¹. The agreements meant here can take different forms, either a formal treaty, a non-binding Memoranda of Understanding³¹² or Cop resolutions³¹³ and no requirement exists for species, who are the subject of such an instrument, to be included in one of the Appendices. A species is only required to periodically cross one or more jurisdictional borders. Agreements under Article IV(4) are open to all range states, including non-parties³¹⁴. Instruments created under this provision are more numerous than those under the previous, numbering at around 20 in total³¹⁵. Examples are the 1990 Agreement on the Conservation of Seals in the Wadden Sea³¹⁶, the 1992 Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas³¹⁷ and the Memorandum of Understanding on West African Populations of the African Elephant³¹⁸. These instruments are often accompanied by an Action Plan, containing their commitments³¹⁹.

³⁰⁵ Article I (1)(i).

³⁰⁶ *Commonwealth of Australia v State of Tasmania* (1983) 46 ALR 625; 68 ILR 266.

³⁰⁷ Article IV (1).

³⁰⁸ Bowman et al. (2010), op.cit. 552.

³⁰⁹ Bowman et al. (2010), op.cit. 554.

³¹⁰ Article V.

³¹¹ Article IV (4).

³¹² A. Trouwborst, 'Global large carnivore conservation and international law', in: 24 *Biodiversity and Conservation*, no. 7, 2015, pp. 1567-1588, 1578.

³¹³ Bonn Convention Secretariat, Resolution 2.6, 'Implementation of Article IV and V of the Convention', 1988.

³¹⁴ Bowman et al. (2010), op.cit. 560.

³¹⁵ Bowman et al. (2010), op.cit. 561.

³¹⁶ Agreement on the Conservation of Seals in the Wadden Sea (adopted 16 October 1990; entered into force 16 October 1994) 2719 UNTS.

³¹⁷ Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (adopted 17 March 1992; entered into force 29 March 1994) 1772 UNTS 217 (ASCOBANS).

³¹⁸ Memorandum of Understanding concerning Conservation Measures for the West African Populations of the African Elephant (adopted 22 November 2005; entered into force 22 November 2005).

³¹⁹ Trouwborst, *supra*, n. 311.

6.1.2 Institutional Framework

The Bonn Convention has a structure which is quite similar to that of other big environmental conventions. Its main institutional organs are the Conference of the Parties, the Secretariat, a Standing Committee and a Scientific Council³²⁰. The Conference of the Parties is the decision-making body of the Convention³²¹ and meets at least every three years. The twelfth meeting is planned for October 2017 in the Philippines³²². Its most important function is to review the implementation of the Convention³²³.

The Secretariat, which has his headquarters in Bonn, has several functions within the Convention set out in Article IX³²⁴. These include for instance the arranging and servicing of the meetings of the Conference of the Parties and the Scientific Council, informing and liaising between states parties and promoting the creation of AGREEMENTS³²⁵.

The Standing Committee was not established by the treaty itself but was called into life at the first meeting of the Conference of the Parties³²⁶. Its main task is to provide guidance in policy and administrative matters in the periods in between meetings of the Conference of the Parties³²⁷. Its composition and organization is the subject of Resolution 9.15 in which its tasks and responsibilities are laid down³²⁸.

The Scientific Council is established to provide advice on scientific matters³²⁹ and is made up of qualified experts, the number of which the Conference of the Parties must decide on³³⁰. Its tasks are to provide scientific advice to the CoP, recommend and undertake research, advise the CoP on the listing of species, recommend specific conservation and management measures and advise the CoP on the implementation of measures relating to habitats³³¹.

6.1.3 Concerted & Co-operative Actions

The concept of Concerted Actions was established by Resolution 3.2 of the CoP³³² and it amounts to a formal review process concerning selected species contained in Appendix I, which would then be considered at each meeting of the CoP with a view to recommending initiatives for their benefit³³³. The goal of this project is the pooling of information by range states and their co-operation in the implementation of conservation measures³³⁴. 41 Appendix I species have been designated for Concerted

³²⁰ Bowman et al. (2010), op.cit. 564.

³²¹ Article VII (1).

³²² Bonn Convention Secretariat, 'Twelfth Meeting of the Conference of the Parties to CMS', <http://www.cms.int/en/cop12>, accessed 16 June 2016.

³²³ Article VII (5).

³²⁴ Article IX (4).

³²⁵ *Ibid.*

³²⁶ Bonn Convention Secretariat, Resolution 1.1, CoP1, 'The Standing Committee of the Conference of the Parties', 1985.

³²⁷ Caddell, *supra*, n. 279, 125.

³²⁸ Bonn Convention Secretariat, Resolution 9.15 CoP9, 'Composition and Organisation of the Standing Committee', 2008.

³²⁹ Article VIII (1).

³³⁰ Article VIII (2).

³³¹ Article VIII 5 (a)-(e).

³³² Bonn Convention Secretariat, Resolution 3.2 CoP3, 'Appendix I Species', 1991.

³³³ *Ibid.*

³³⁴ Bowman et al. (2010), op.cit. 574.

Action in the period of 2015-2017³³⁵. For species in Appendix II this system does not apply. The system of Co-operative Actions was created at the fifth meeting of the CoP in 1997³³⁶ and aims to increase co-operation in conservation of certain Appendix II species and especially those for which an agreement, as mentioned in Article IV(4), is not in sight. 56 species have been selected for Co-operative Actions in the period of 2015-2017³³⁷.

The most recent Resolution concerning both these types of actions is accompanied by a recommendation for enhancing their effectiveness³³⁸. It is recommended that both actions are combined and streamlined into one type of action to improve its clarity. In the future only Concerted Actions will then remain in existence and will be applied to species of both Appendices³³⁹.

6.2 Bonn and rhinoceroses

When thinking about typical migratory species, the Arctic tern (*Sterna paradisaea*), migrating from the high Arctic to the Antarctic³⁴⁰, or the blue whale (*Balaenoptera musculus*) travelling the world's oceans³⁴¹, or maybe the African wild dog (*Lycaon pictus*) guiding its pack over vast savannas³⁴², might spring to mind, but certainly not the five rhino species of the world. The rhinoceros is a mainly sedentary animal and has therefore not been included in any of the Appendices or been dealt with in any Resolutions or Recommendations of the Convention.

The Convention does however have a potential relevance for the rhinoceros, as it does concern endangered species, such as the five rhino species and could prove beneficial for them in several ways. The Convention has proven to not be rigid in their interpretation of the treaty text and the term 'migratory species' can now be deemed to mean 'transboundary'³⁴³. Species who at least cross a border now and then can fall under the definition of migratory and such border-crossing does not need to occur cyclically or predictably. The listing of *inter alia* the mountain gorilla (*Gorilla beringei beringei*)³⁴⁴ on Appendix I and the forest elephant (*Loxodonta cyclotis*)³⁴⁵ on Appendix II are examples of that approach because neither are migratory species in the classical sense of the word. The forest elephant certainly not since its range has been restricted to national parks³⁴⁶. This seems to offer opportunities for the rhinoceros to be listed on one of the Appendices as well. If a rhinoceros species would be listed on Appendix I the state obligations mentioned in Article III (4) & (5) would likely greatly benefit the rhino.

³³⁵ Bonn Convention Secretariat, Resolution 11.13 CoP11, 'Concerted and Cooperative Actions', 2014.

³³⁶ Bonn Convention Secretariat, Recommendation 5.2 CoP5, 'Co-operative Actions for Appendix II Species', 1997.

³³⁷ Bonn Convention Secretariat, *supra*, n. 334.

³³⁸ *Ibid.*

³³⁹ *Ibid.*

³⁴⁰ Birdlife International, *Sterna paradisaea*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/22694629/0>, accessed 16 June 2016.

³⁴¹ S.B. Reilly, J.L. Bannister, P.B. Best, M. Brown, R.L. Brownell, D.S. Butterworth, P.J. Clapham, J. Cooke, G.P. Donovan, J. Urban, A.N. Zerbini, *Balaenoptera musculus*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/2477/0>, accessed 16 June 2016.

³⁴² R. Woodroffe, C. Sillero-Zubiri, *Lycaon pictus*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/12436/0>, accessed 16 June 2016.

³⁴³ Trouwborst, *supra*, n. 294.

³⁴⁴ M. Robbins, L. Williamson, *Gorilla beringei*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/39994/0>, accessed 15 June 2016.

³⁴⁵ L. Laursen, M. Bekoff, 'Loxodonta africana', in: 92 *Mammalian Species*, 1978, pp. 1-8.

³⁴⁶ *Ibid.*

A general prohibition on the taking, meaning the hunting and killing, of rhinoceroses would then apply³⁴⁷. And rhino range states will then have to endeavor to conserve and restore rhino habitats, and prevent, reduce or control factors that are endangering the species³⁴⁸.

If a rhino species were to be listed under Appendix II, like the forest elephant (*Loxodonta cyclotis*) or the African elephant (*Loxodonta Africana*), this would mean rhino range states would have to endeavor to conclude AGREEMENTS benefitting the species³⁴⁹. Under this provision the legally binding 2007 Agreement on the Conservation of Gorillas and Their Habitats has been concluded for example³⁵⁰, which like the rhinoceros concerns an atypical migratory species. A similar AGREEMENT could be drafted for the rhinoceros, which would be legally binding on range states becoming a party³⁵¹.

Rhino range states would also be encouraged through Article IV (4) to take action with a view to concluding agreements for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdiction boundaries³⁵². To be the subject of an agreement concluded under this provision, a species does not even have to be listed under one of the Appendices³⁵³, making it directly accessible for rhinoceroses. Further, parties to such an agreement can be states who are not a party to CMS, which for the rhinoceros can be important because major rhino range states like Botswana, Indonesia and Namibia are not a party³⁵⁴.

Rhino species also periodically cross one or more borders, like the Indian rhinoceros does for example between India and Bhutan³⁵⁵, or the white rhinoceros between South Africa and Mozambique³⁵⁶ and the Sumatran rhinoceros possibly does between Indonesia and Malaysia³⁵⁷.

The types of agreement concluded under Article IV(4) are mostly non-binding Memoranda of Understanding and one concerning a rhinoceros species could possibly be concluded. Similar to others already concluded concerning the Bukhara deer (*Cervus elaphus bactrianus*)³⁵⁸, Saiga antelope (*Saiga tatarica tatarica*)³⁵⁹ or African elephant (*Loxodonta Africana*)³⁶⁰.

Another instrument which in theory could also be used to benefit the rhinoceros is the Special Species

³⁴⁷ Article III (5).

³⁴⁸ Article III (4).

³⁴⁹ Article IV (3).

³⁵⁰ Agreement on the Conservation of Gorillas and their Habitats (adopted 26 October 2007; entered into force 1 June 2008) UNTS 2545 (Gorilla Agreement).

³⁵¹ Trouwborst, *supra*, n. 311, 1578.

³⁵² Article IV (4).

³⁵³ Bowman et al. (2010), *op.cit.* 558.

³⁵⁴ See Table 1.

³⁵⁵ B.K. Talukdar, R. Emslie, R. Bist, S.S. Choudhury, S. Ellis, B.S. Bonal, M.C. Malakar, B.N. Talukdar, M. Barua, *Rhinoceros unicornis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/19496/0>, accessed 15 June 2016.

³⁵⁶ R. Emslie, *Ceratotherium simum*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/4185/0>, accessed 23 March 2016.

³⁵⁷ N.J. Van Strien, B. Manullang, Sectionov, W. Isnan, M.K.M. Khan, E. Sumardja, S. Ellis, K.H. Han, Boeady, J. Payne, E. Bradley Martin, *Dicerorhinus sumatrensis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/6553/0>, accessed 15 June 2016.

³⁵⁸ Memorandum of Understanding concerning Conservation and Restoration of the Bukhara Deer (*Cervus elaphus bactrianus*) (adopted 16 May 2002; entered into force 1 August 2002).

³⁵⁹ Memorandum of Understanding concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope (*Saiga tatarica tatarica*) (adopted 24 September 2006; entered into force 24 September 2006).

³⁶⁰ MoU, *supra*, n. 317.

Initiative which is carried out under the auspices of the CMS³⁶¹. To restore and maintain gazelle and antelope populations in the Sahelo-Saharan region such a project was launched in 1998³⁶². The framework is aimed at bringing together all the actors in the conservation process, which are NGO's, scientists, local people, governments (of all the gazelle and antelope range states) and the general international community in the project to preserve the most threatened populations³⁶³. This project covers most of northern Africa and does therefore not touch upon rhino range states. A similar project could be initiated however for the southern part of the continent, relating to the threatened antelopes and gazelles present there or at for instance elephants and rhinoceroses. Either way, rhinoceroses will likely benefit from such an endeavor.

A final possibility for the rhinoceros to be mentioned is only applicable in case one of the species is listed in either of the Appendices. If such is the case, in the future a Concerted Action could perhaps be dedicated to it. The effectiveness of that Convention instrument remains to be seen however³⁶⁴.

6.3 The Bonn Convention: an assessment from the rhino perspective

With several major rhino range states not being a party to the treaty, rhinos not being listed in any of the Appendices and rhinoceroses in general not being an outspoken migratory species, the relevance of the Bonn Convention for this large mammal is limited. However, as the previous paragraph has shown, plenty of potential exists for the rhinoceros to benefit from the Convention's possibilities regarding protection. Other non-migratory species such as the mountain gorilla have preceded the rhino in that respect. Given the severely endangered status of multiple rhinoceros species, all options which could benefit conservation deserve to be considered.

The effectiveness of the Convention has been deemed as unsatisfactory³⁶⁵ for several reasons, including the absence of major states like the USA, Russia, China, Canada and Japan, the insufficient financial resources of the Convention, the lack of implementation of the core provisions by parties, that many Appendix II species are still not protected by AGREEMENTS, state participation in reporting is quite low and only a very small part of listed species is actually monitored³⁶⁶. The strength of the Convention is questionable, which makes the actual potential it could have for the rhino also questionable.

For the rhino however, it is essential that the number of rhino range states ratifying the Convention is increased and the species is listed on one of the Appendices, if the Convention is to have any significant effect. A listing proposal therefore needs to be made by a Contracting Party³⁶⁷.

³⁶¹ Trouwborst, *supra*, n. 311, 1579.

³⁶² Bonn Convention Secretariat, Special Species Initiatives, 'Sahelo-Saharan Megafauna', 1998, <http://www.cms.int/en/legalinstrument/sahelo-saharan-megafauna>, accessed 16 June 2016.

³⁶³ *Ibid.*

³⁶⁴ Bowman et al. (2010), *op.cit.* 575.

³⁶⁵ Baakman (2011), *op.cit.* 322.

³⁶⁶ *Ibid.*

³⁶⁷ Article XI (2).

7. The Convention on Biological Diversity

7.1 The Convention on Biological Diversity

“Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems”³⁶⁸

As a living organism which is part of an ecosystem, the rhinoceros is also included in this definition which stems from the fifth and last treaty to be discussed in this study, the 1992 Convention on Biological Diversity (CBD). This one of a kind instrument, meant to protect biological diversity, entered into force on 29 December 1993, following a rapid creation process. The establishment of an international legal instrument concerning the planet’s biodiversity was first proposed in 1989 at the 15th Governing Council Session of UNEP³⁶⁹ and had to be finished before the United Nations Conference on Environment and Development (UNCED) in June 1992³⁷⁰. At that United Nations Conference, after its thirtieth ratification, the instrument was opened for signing and entered into force, only eighteen months later. Currently the treaty enjoys almost universal ratification with 196 parties, with the USA the only major state who’s not a party³⁷¹. All rhino range states have ratified the Convention and are therefore bound by its obligations³⁷².

The Convention is not just aimed, as its name suggests, at the conservation of global biodiversity, but also at the sustainable use of the components of biological diversity and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources³⁷³. Its focus on sustainable use instead of merely conservation is one of several reasons why the treaty is considered unique in its field of law³⁷⁴ and why some have branded it as a “new breed” of treaty³⁷⁵.

The speed of its conception, as compared to the other large environmental treaties usually taking 5-10 years from initiation to completion, is remarkable and so is the introduction of new legal concepts such as biodiversity, ecosystems, genetic resources, benefit sharing and traditional knowledge³⁷⁶. This also underlines the broadness of the treaty’s scope which ranges from, combating deforestation and

³⁶⁸ Convention on Biological Diversity (adopted 5 June 1992; entered into force 29 December 1993) 1760 UNTS 79 (CBD), Article 2.

³⁶⁹ Resolution 15/34

³⁷⁰ UNGA Resolution 44/228

³⁷¹ CBD, ‘List of Parties’, <https://www.cbd.int/information/parties.shtml>, accessed 15 June 2016.

³⁷² See Table 1.

³⁷³ CBD, Article 1.

³⁷⁴ E. Morgera, E. Tsioumani, ‘Yesterday, Today and Tomorrow: Looking Afresh at the Convention on Biological Diversity’, *University of Edinburgh School of Law Working Paper*, no. 2011/21, 2011.

³⁷⁵ C. Tinker, ‘A “New Breed” of Treaty: The United Nations Convention on Biological Diversity’, in: 13 *Pace Environmental Law Review*, no. 1, 1995, pp. 191- 218.

³⁷⁶ Morgera, *supra*, n. 372.

desertification to managing fragile ecosystems on land and at sea³⁷⁷. Thus all the different kinds of rhino habitat are covered. The Convention further gives attention to the equal division of benefits between developed and developing countries and enables developing countries, in the spirit of the Stockholm Conference³⁷⁸ to act as a sovereign over their own natural resources³⁷⁹.

To achieve these objectives the Convention has taken the form of a framework agreement. Although this is not explicitly mentioned in its title, it is seen by many as such an instrument³⁸⁰. A framework agreement lays down a basic structure of principles and objectives which are then to be executed and perfected through subsequent instruments³⁸¹. According to McGraw³⁸², the CBD does this in 3 different ways. First, it creates a global structure to promote continued international cooperation and to support national implementation³⁸³, second, it allows for its own further development through annexes and protocols³⁸⁴ and third, it builds upon existing agreements³⁸⁵. Because of its framework character, its guideline like approach and its constantly evolving character, much of the Convention text is quite broadly formulated, leaving much room for discretion. This has led to the critique that the CBD is too vague and ineffective³⁸⁶ or haphazard and ambiguous³⁸⁷. According to Birnie, Boyle and Redgwell³⁸⁸ however it is necessary to “look more to the implementation process than the textual analysis of the Convention’s provisions in order to measure its contribution to the conservation of biodiversity”. Evident is that the treaty provisions do not impose concrete, justiciable obligations on the states parties, but rather establishes principles or objectives for states to implement in their national legislation, leaving them with ample room for discretion³⁸⁹. This of course, renders the effectiveness of the treaty completely dependent upon national implementation. Article 6 of the Convention, dubbed as one its most far-reaching articles³⁹⁰ sets out the national obligations concerning implementation. Parties shall develop national strategies, plans or programs for the conservation and sustainable use of biological diversity and integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into existing plans, programs and policies³⁹¹. Because this provision, like many others in the Convention speaks in such broad terms and not in concrete obligations, it is hard to determine when a Contracting Party is complying or violating it. This is also the reason no non-compliance

³⁷⁷ M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010), 593.

³⁷⁸ Stockholm Conference Principle 21

³⁷⁹ Article 3.

³⁸⁰ Morgera, *supra*, n. 372.

³⁸¹ D.M. McGraw, ‘The CBD – Key Characteristics and Implications for Implementation’, in: 11 *Review of European Community & International Environmental Law*, no. 1, pp. 17-29.

³⁸² *Ibid.*

³⁸³ *Ibid.*

³⁸⁴ *Ibid.*

³⁸⁵ *Ibid.*

³⁸⁶ Morgera, *supra*, n. 372.

³⁸⁷ V. Koester, ‘The Biodiversity Convention Negotiation Process And Some Comments on the Outcome’, in: 27 *Environmental Policy & Law*, no. 3, 1997, pp. 175-191.

³⁸⁸ P. Birnie, A. Boyle, C. Redgwell, *International Law and the Environment*, (2nd ed. Oxford University Press New York 2002), 572.

³⁸⁹ A. Trouwborst, ‘Global large carnivore conservation and international law’, in: 24 *Biodiversity and Conservation*, no. 7, 2015, pp. 1567-1588.

³⁹⁰ L. Glowka, F. Burhenne-Guilmine, H. Synge, J.A. McNeely, L. Gündling, *A guide to the Convention on Biological Diversity*, (3rd ed. IUCN, Gland, Switzerland and Cambridge, UK 1994).

³⁹¹ Article 6.

procedures exist under the Convention³⁹², but just a Working Group on Review of Implementation of the Convention³⁹³.

7.1.1 Key Provisions of the Convention

Article 8 of the Convention concerns *in situ* conservation³⁹⁴, which is “the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties”³⁹⁵, as opposed to *ex situ* conservation dealt with in article 9, which means “the conservation of components of biological diversity outside their natural habitats”³⁹⁶, like for instance in zoos³⁹⁷. Article 8 sets out thirteen different obligations states have with regard to *in situ* conservation and article 9 complements those with five *ex situ* obligations. In both articles Contracting Parties shall perform the obligations “as far as possible and as appropriate”, leaving them with a margin of discretion. Article 8 requires states to *inter alia*: establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity, promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings, rehabilitate and restore degraded ecosystems and promote the recovery of threatened species and develop or maintain necessary legislation and other regulatory provisions for the protection of threatened species and populations³⁹⁸. Article 9 requires states to: adopt measures for the *ex situ* conservation of components of biological diversity, establish and maintain facilities for *ex situ* conservation of animals, adopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats, regulate and manage collection of biological resources from natural habitats for *ex situ* conservation purposes and cooperate in providing financial and other support for *ex situ* conservation³⁹⁹. Rhinoceros species should therefore be protected by states through the protection of their habitat, states should maintain a viable population and rhino species recovery should be promoted. Zoos or similar *ex situ* institutions can be used to preserve rhino species, function as a sort of safeguard for a species’ survival and form the basis for later reintroduction of the species.

The obligations mentioned in article 8 are the most important ones and those in article 9 serve to complement the objectives article 8 aims to achieve. All of this is supposed to occur within the context of the so called ecosystem approach, which is: “a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources⁴⁰⁰. This approach should be used by Contracting Parties as the primary framework in which to achieve the objectives of the Convention⁴⁰¹.

³⁹² Bowman et al. (2010), op.cit. 619.

³⁹³ Bowman et al. (2010), op.cit. 620.

³⁹⁴ Article 8.

³⁹⁵ Article 2.

³⁹⁶ *Ibid.*

³⁹⁷ Bowman et al. (2010), op.cit. 599.

³⁹⁸ Trouwborst, *supra*, n. 387, 1579.

³⁹⁹ Article 9.

⁴⁰⁰ CBD, CoP 5 Decision V/6, ‘Ecosystem approach’, 2000.

⁴⁰¹ CBD, CoP 7 Decision VII/11, ‘Ecosystem approach’, 2004.

Article 7 and Article 14 are also worth mentioning. Article 7 requires of Contracting Parties to, as far as possible and as appropriate, identify their biological diversity components, to monitor them, to establish the possible adverse effects thereon and maintain the information emanating from that⁴⁰², so to basically keep track of the current status of their biological diversity.

Article 14 is titled “Impact Assessment and Minimizing Adverse Impacts” and requires Contracting Parties to, as far as possible and as appropriate, introduce EIA’s, to ensure arrangements are made to take into account significant adverse impacts, to promote the exchange of information between states on activities like to significantly affect adversely the biological diversity of another state, immediately take action or notify other states in case of imminent or grave danger to their biological diversity and promote national arrangements for emergency responses to activities or events which present a grave and imminent danger to biological diversity and encourage international cooperation to supplement such national efforts⁴⁰³.

7.1.2 Institutional Arrangements

The institutional structure of the CBD rests on 4 organs, the Conference of the Parties⁴⁰⁴, the Secretariat⁴⁰⁵, a Clearing House Mechanism⁴⁰⁶ and Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)⁴⁰⁷. The Conference of the Parties is the governing body, in charge of keeping the implementation of the Convention under review⁴⁰⁸ and other tasks such as considering amendments to the Convention⁴⁰⁹ and adopting annexes to the Convention⁴¹⁰.

The Clearing House Mechanism is there to promote and facilitate technical and scientific cooperation and the SBSTTA should provide the Conference of the Parties with timely advice relating to the implementation of the Convention⁴¹¹. The Secretariat is established to arrange and service the meetings of the Conference of the Parties, perform any functions assigned to it by any protocol, prepare reports on the execution of its functions, coordinate with other relevant international bodies and, in particular to enter into such administrative and contractual arrangements as may be required for the effective discharge of its functions and to perform any other function the Conference of the Parties deems it fit to do⁴¹².

Lastly it is important to note the existence of the Biodiversity Liaison Group, a partnership of the secretariats of seven global biodiversity related conventions, consisting *inter alia* of the 5 conventions dealt with in this study. The Group was created by the Conference of the Parties of the CBD to improve the coordination and collaboration between treaties⁴¹³.

⁴⁰² Article 7.

⁴⁰³ Article 14.

⁴⁰⁴ Article 23.

⁴⁰⁵ Article 24.

⁴⁰⁶ Article 18(3).

⁴⁰⁷ Article 25.

⁴⁰⁸ Article 23 (4).

⁴⁰⁹ Article 23 (4)(d).

⁴¹⁰ Article 23 (4)(f).

⁴¹¹ Article 25 (1).

⁴¹² Article 24.

⁴¹³ CBD, CoP 7 Decision VII/26, ‘Cooperation with other conventions and international organizations and initiatives’, 2004.

7.2 CBD and rhinoceroses

In its general objectives and overarching character the CBD is potentially important to the conservation of the rhinoceros. The obligations it imposes on the Contracting Parties are not very specific or concrete in nature, but are designed in a manner which can ultimately prove beneficial to the five rhinoceros species. No rhino populations in the world should be excluded from such benefits, as all rhino range states are a party to the CBD⁴¹⁴ and are therefore bound by its provisions. Rhinoceroses are of course part of the definition of biological diversity the Convention uses and therefore indirectly a subject of the treaty. The system of the CBD functions without appendices of species or a list of certain habitats, so in that sense the rhinoceros is not dealt with directly by the Convention. Provisions such as article 8 do lay down certain obligations for Contracting Parties however, like the obligation to create protected areas or the obligation to restore degraded ecosystems⁴¹⁵, which are likely to benefit the rhinoceros. Contracting Parties are also mandated to maintain viable populations of species⁴¹⁶ and to develop or maintain necessary legislation for the protection of threatened species⁴¹⁷. Furthermore, the large amount of activities the CBD undertakes to promote the conservation of biological diversity and to address problems affecting biological diversity worldwide could also benefit the rhinoceros. The Convention is, as Trouwborst puts it⁴¹⁸, “a high-profile forum for signaling, discussing, and sharing information and experience regarding all kinds of conservation issues, and the development and adoption of non-binding but authoritative guidance regarding those issues by the CBD CoP”. The rhinoceros can be considered an indirect beneficiary of the goals the Convention aspires to achieve. Like for instance the Aichi Biodiversity Targets⁴¹⁹, of which target number 12 states: “By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained”. It is evident the rhinoceros is also addressed here, with nearly all of the five species being endangered. As mentioned, rhinoceroses are not addressed directly by the Convention, nor do they explicitly feature in any of the CoP’s decisions. They are however mentioned in the National Reports⁴²⁰ (on implementation measures and their effectiveness) and National Action Plans⁴²¹ (for the conservation and sustainable use of biological diversity) the Convention requires rhino range states to compose. Nepal reports for example in their fifth National Report that there has been an increase of 17 percent in protected areas and an increase in the population of rhinoceroses⁴²², South Africa reports that it has created a Biodiversity Management Plan for the black rhinoceros⁴²³, India has in line with the 12th Aichi Target established an Indian Rhinoceros Recovery Plan and the Indian Rhino Vision⁴²⁴ and Mozambique states in its Strategy and Action Plan that combatting rhino poaching is currently one of the national

⁴¹⁴ See Table 1.

⁴¹⁵ Article 8.

⁴¹⁶ Article 8 (d).

⁴¹⁷ Article 8 (k).

⁴¹⁸ Trouwborst, *supra*, n. 387, 1579.

⁴¹⁹ CBD, ‘Aichi Biodiversity Targets’, <https://www.cbd.int/sp/targets/>, accessed 15 June 2016.

⁴²⁰ Article 26.

⁴²¹ Article 6(a).

⁴²² CBD, National Reports, ‘Nepal Fifth National Report to Convention on Biological Diversity’, 2014, vi.

⁴²³ CBD, National Reports, ‘South Africa’s Fifth National Report to the Convention on Biological Diversity’, 2014, vi.

⁴²⁴ CBD, National Reports, ‘India’s Fifth National Report to the Convention on Biological Diversity’, 2014, 72.

priorities⁴²⁵. These are signs the treaty is being implemented and is having a noticeable effect for the rhinoceros. The framework character of the Convention however makes it difficult to establish a direct connection between the rhinoceros and the Convention.

7.3 The Convention on Biological Diversity: An assessment from the rhino perspective

Assessing the Convention on Biological Diversity from the perspective of the rhino remains difficult for mentioned reasons. It is evident the rhinoceros, as a part of biological diversity is meant to profit from the conservation measures the Convention lays down, but concrete obligations relating to the rhinoceros are not mentioned. The Convention could be considered as an instrument setting the standard for states to aspire to, as it does for instance with regard to the Aichi Biodiversity Targets. Its effectiveness to such ends is largely dependent on implementation by the Contracting Parties. In case a rhino range state should implement and live up to its treaty obligations to the fullest, its rhinoceros populations would probably not have to worry about its preservation. All rhino range states are a party to the Convention and all rhino range states are therefore obliged to live up to the treaty obligations contained in the CBD, mentioned in the previous paragraph, thereby leaving no rhinoceros populations excluded from the potential protection of the Convention.

One of the Convention's weaknesses is perhaps the wording of its articles, which leaves substantial room for state discretion. This could weaken the strictness of the obligations imposed on Contracting Parties, possibly making it ineffective in practice.

The Convention's value for the rhinoceros should probably be sought in its high participation number, its broad approach covering all aspects of conservation and its ability to place matters on the agenda of states. The five species of rhinoceros could perhaps benefit from greater prominence in national reports and strategic plans, a CoP decision being dedicated to them or featuring in an edition of the CBD Technical Series⁴²⁶.

⁴²⁵ CBD, National Biodiversity Strategies and Action Plans (NBSAPs), 'National Strategy and Action Plan of Biological Diversity of Mozambique (2015-2035)', 2015, 48.

⁴²⁶ CBD, 'CBD Technical Series', <https://www.cbd.int/ts/?sec=more>, accessed 16 June 2016.

8. Conclusion

Rhinoceros species worldwide are threatened with extinction and their perspectives for survival are dim. Horn trade and use has risen explosively over the past few years, leading to surging horn prizes on the black market and an increase in poaching⁴²⁷. As if this was not enough for the species to cope with, habitats everywhere are under pressure from human activities, such as logging, mining and agriculture. In the above analysis the role international law plays in these issues is discussed. The goal of this study was to determine the legal protection the rhinoceros enjoys through the existing international legal framework concerning wildlife conservation. To achieve this, the five main biodiversity-related instruments were analyzed and assessed with regard to their relevance for the rhinoceros. What legal protection do these instruments provide the species and what does this protection amount to? Furthermore, several recommendations were made for improvements where they were deemed appropriate and possible.

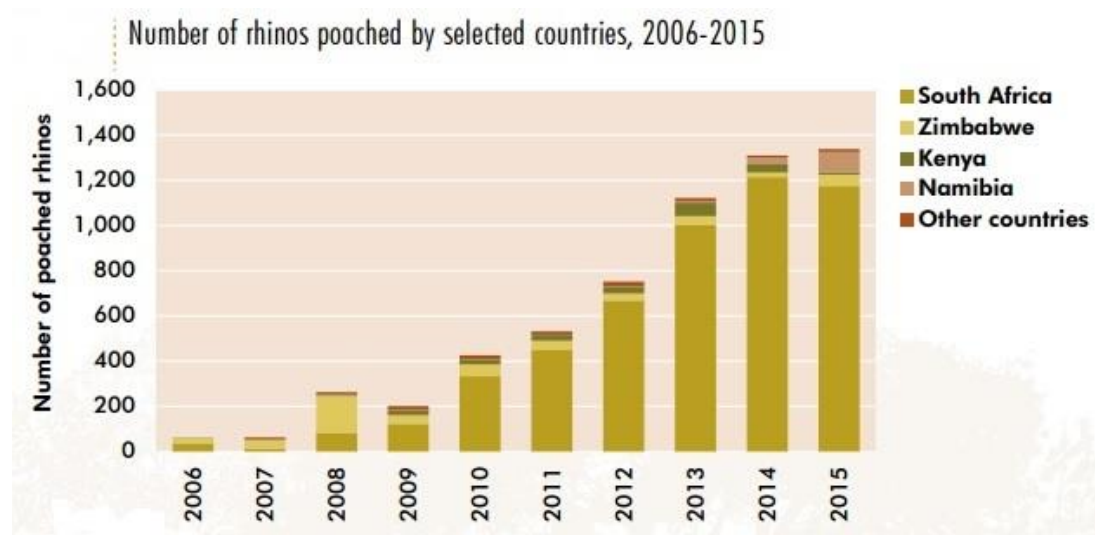


Figure 2. Number of rhinos poached by selected countries. Source: World Wildlife Crime Report 2016.

The five conventions dealt with in this study are, CITES, the Ramsar Convention, the World Heritage Convention, the Bonn Convention and the CBD. While all these instruments were found to be of relevance or potential relevance for the rhinoceros, the extent to which this was the case differed substantially. The above study has shown a large body of law exists with regard to wildlife protection and more specifically rhinoceros protection, the level of ratification of the major conventions by rhino range states is high and rhinos and their habitats are theoretically well protected. In contrast to for example large carnivores⁴²⁸, no significant gaps in legal rhinoceros protection exist and potential enhancements mainly concern the effectiveness of the existing legal regime.

⁴²⁷ See Figure 2.

⁴²⁸ A. Trouwborst, 'Global large carnivore conservation and international law', in: 24 *Biodiversity and Conservation*, no. 7, 2015, pp. 1567-1588.

8.1 CITES

CITES is probably the most vital instrument concerning the issues currently facing rhinoceroses, such as the illegal rhino horn trade and poaching. Ratified by most rhino range states, it focuses on regulating the trade in listed endangered species, through a system of Appendices which all come with their own regime of rules. Most rhinoceroses are listed under Appendix I, subjecting them to the most stringent protective regime, which should ideally lead to the trade in rhinoceros derivatives only occurring in exceptional cases and through regulated canals, thereby ensuring rhinoceros survival. CITES and its institutions have been quite active in attempting to achieve this goal and a substantial amount of documents have been devoted to the rhinoceros. Among those documents are a resolution concerning the general policy of CITES towards rhinos, decisions urging states to combat poaching, a decision establishing an export quota, several decisions encouraging states to increase the deterrent effect of their sanctions and to raise awareness among their citizens.

CITES has still not achieved its rhino mission though and the system has not proven to be entirely effective. A different approach might therefore be necessary and deserves consideration. This could be the reconsideration of the Appendix I listing of most rhino species and possibly down listing them, as has happened with the white rhinoceros populations of South Africa and Swaziland. Abuse of this Appendix II listing has often occurred however and is perhaps not the way to go⁴²⁹. Another option could be the lifting of the trade ban and allowing a regulated trade to meet the demand, with a central institution overseeing the market. Some African states who are in possession of a large stockpile of rhino horn propagate this option⁴³⁰. Further research is however needed to be able to make conclusive statements. In October of 2016 the 17th Meeting of the Conference of the Parties will be held in South Africa and there the future route of CITES will most likely become clear.

8.2 Ramsar

Under the Ramsar Convention, rhinos are protected through the protection of their habitat, in case such habitat is a wetland. Wetlands contained on the Ramsar list are to be conserved and used wisely by the many rhino range states who are a party to the Convention. To qualify for the Ramsar list, a wetland is required to possess several characteristics. One of such characteristics can be the presence of an endangered rhino population. Wetlands harboring an endangered rhino population, should ideally be given a Ramsar listing and consequently enjoy its protection. Increasing the number of wetlands on the Ramsar list, is a matter the Convention can significantly improve upon, for the benefit of the rhinoceros. Furthermore, general treaty compliance could be better and implementation levels of treaty obligations like the establishing of management plans, should be raised by rhino range states.

8.3 The World Heritage Convention

The World Heritage Convention is probably one of the most well-known and prestigious international environmental conventions. Centered on the World Heritage List, the Convention obliges its members to protect their natural heritage sites of outstanding universal value and thus like the Ramsar Convention is focused on habitats rather than individual species. A contributing factor in deciding on whether or not a site is of outstanding universal value and on whether or not it is listed therefore, is the presence of a rhinoceros population. Several rhino habitats already feature on the list and the rhinos present there should enjoy the protection of the Convention. The more rhino habitats enjoying this protection the

⁴²⁹ United Nations, UNODC, 'World Wildlife Crime Report: Trafficking in protected species', 2016, 70.

⁴³⁰ M. 't Sas-Rolfes, T. Fitzgerald, 'Can a legal horn trade save rhinos? ', *PERC Research Paper*, no. 13-6, 2013.

better and rhino sites embedded in Tentative Lists should be upgraded to the World Heritage List to utilize the Convention's full potential. Furthermore, options of international prosecution should be explored, concerning either liability for states or individual criminal responsibility for the destruction or damaging of world heritage. The exterminators of the rhino population in Garamba National Park could potentially be held accountable in that way. It is however way too soon to draw such conclusions and additional research is required. As with nearly all environmental conventions, compliance, implementation and enforcement of treaty obligations enshrined in the World Heritage Convention can be severely improved upon.

8.4 Bonn Convention

The Bonn Convention is, together with CITES, one of the two conventions dealt with that focus on individual species. However unlike CITES, of which all endangered species are the subject, the Bonn Convention concentrates solely on migratory species. This explains the limited relevance the Convention has for the rhinoceros, as it is generally not considered a migratory species. No mention is made in the Convention or in any of its official documents of the rhinoceros species. For now the rhinoceros therefore enjoys no actual benefits of the Bonn Convention, but as this study has shown, opportunities do exist for changing this. The species could be listed under one of the Appendices, different types of legal instruments concerning the rhino can be concluded and conservation initiatives rooted in the Convention can be created. The Convention has proven to be broadening in scope and could prove to be of significance in the future. Of all the treaties discussed it has probably the most potential for expansion, especially in the area of creating new legal instruments. The ratification of the Convention by rhino range states such as Botswana, Namibia and Indonesia should also be a priority.

8.5 CBD

The most recent convention to be dealt with in this study is the 1992 Convention on Biological Diversity, which applies a rather new approach to conservation. Conserving global biodiversity is its main objective which also entails, as a part thereof, conserving the rhinoceros and its habitat. The CBD is thus not to be classified as a convention aimed at species protection or as a convention aimed at habitat protection but rather as its own breed of convention providing a framework for global biodiversity protection. As such the rhino falls under its scope but is not addressed specifically. The CBD is a high profile environmental treaty enjoying near universal ratification and in the case of rhino range states even complete ratification. Its collaborative character, illustrated through *inter alia* the Biodiversity Liaison Group, could perhaps combine efforts of other conventions for the benefit of the rhino. It is however hard to assess the relation of the Convention to rhinoceroses due to the broadly formulated treaty obligations and the absence of the species in treaty body documents. States parties have however derived obligations towards rhinos from the general obligations mentioned in the Convention, as several National Reports show. When the CBD persists in its approach to combine efforts of different instruments and disciplines it could in the future prove to be of great importance to the rhinoceros. For now however this relevance remains limited.

8.6 Recommendations and the future

The above study has shown a large body of law exists with regard to wildlife protection and more specifically rhinoceros protection, the level of ratification of the major conventions by rhino range states is high and rhinos and their habitats are theoretically well protected. A large legal scheme for the protection of rhinoceroses is in place and if all rhino range states would execute their treaty obligations

to the fullest, the rhino would probably be a lot better off. In the case of international conventions this has always proven to be easier said than done however. Some general recommendations can be made with regard to the conventions analyzed in this study. Treaty compliance needs to improve, implementation needs to increase and enforcement mechanisms need to be created or strengthened⁴³¹. Such generic recommendations are probably appropriate for many international conventions, but are certainly applicable to the field of environmental law. A treaty, banning the trade in rhinoceros specimens, is not by itself going to stop such illegal trade. Enforcement, through states parties and their respective judicial systems is necessary to combat criminal activities concerning the rhino. The first ever World Wildlife Crime Report being published by the UN Commission on Crime Prevention and Criminal Justice in May of 2016 is an indication the subject is rising on the international agenda⁴³². Perhaps the options of litigation before the ICJ or the ICC, as mentioned in the chapter on the World Heritage Convention, should be further explored as to enable violations of treaty obligations to be dealt with in a court.

In upholding international treaty obligations the national judge can prove significant as well, as the *Tasmanian Dam* case has proven in case of the World Heritage Convention and the Dutch case concerning a wetland on Bonaire has done regarding the Ramsar Convention. It is probably up to NGO's to explore this route further and challenge state conduct in national courts, for the sake of the rhinoceros.

Another way of improving the situation of the rhinoceros through legal means is perhaps the concluding a new legal instrument specifically dedicated to the species. Similar to binding instruments such as the Polar Bear Agreement⁴³³, the Agreement on the Conservation of Albatrosses and Petrels⁴³⁴, the Agreement on the Conservation of Populations of European Bats⁴³⁵ and the Agreement on the Conservation of Gorillas and their Habitats⁴³⁶, which bring together range states in their efforts to conserve an individual species. This could occur under the auspices of an existing convention, as was the case with the European Bats Agreement, the Albatros Agreement and the Gorilla Agreement, which were formed under the Bonn Convention. Or in the manner of the Polar Bear Agreement, as a stand-alone convention concluded between range states. Naturally, questions will then arise as to how such an instrument should be set up or which of the five species it will cover or whether or not it will also include habitat protection, however it is beyond the scope of this study to answer such questions. The above analysis has shown the international legal framework concerning the protection of the rhinoceros possesses a great amount of potential, which if used to its full extent by the relevant actors could help the rhinoceros enormously. Despite numerous developments concerning the species inclining us to be pessimistic about the future, the present legal potential does provide reasons for optimism.

⁴³¹ K. Baakman, *Testing times: the effectiveness of five international biodiversity-related conventions*, (1st ed. Wolf Legal Publishers Utrecht 2011).

⁴³² UN, *supra*, n. 428.

⁴³³ Agreement on Conservation of Polar Bears (adopted 15 November 1973; entered into force 26 May 1976) 27 UST 3918 (Polar Bear Agreement).

⁴³⁴ Agreement on the Conservation of Albatrosses and Petrels (adopted 19 June 2001; entered into force 1 February 2004) UNTS 2258 (Albatros Agreement).

⁴³⁵ Agreement on the Conservation of European Bats (adopted 4 December 1991; entered into force 16 January 1994) UNTS 1863 (EUROBATS).

⁴³⁶ Agreement on the Conservation of Gorillas and their Habitats (adopted 26 October 2007; entered into force 1 June 2008) UNTS 2545 (Gorilla Agreement).

Bibliography

Articles, research papers, information documents

1. Amin R., Thomas K., Emslie R.H., Foose T.J., Van Strien N., 'An overview of the conservation status of and threats to rhinoceros species in the wild', in: 40 *International Zoo Yearbook*, no. 1, 2006, pp. 96-117.
2. Biggs D., Courchamp F., Martin R., Possingham H.P., 'Legal Trade of Africa's Rhino Horns', in: 339 *Science*, no. 6123, 2013, pp. 1038-1039.
3. Chechi A., 'The 2013 Judgment of the ICJ in the *Temple of Preah Vihear* Case and the Protection of World Cultural Heritage Sites in Wartime', in: 6 *Asian Journal of International Law*, no. 2, 2016, pp. 353 – 378.
4. Crookes D.J., Blignaut J.N., 'Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand', in: 28 *Journal for Nature Conservation*, 2015, pp. 11-18.
5. Caddell R., 'International Law and the Protection of Migratory Wildlife: An Appraisal of Twenty-Five Years of the Bonn Convention', in: 16, *Colorado Journal of International Environmental Law and Policy*, no. 1, 2005, pp. 113-256.
6. Denninger Snyder K., 'The Common Hippopotamus in the Wild and in Captivity: Conservation for Less Charismatic Species', in: 18 *Journal of International Wildlife Law & Policy*, no. 4, 2015, pp. 337-354.
7. Di Minin E., Laitila J., Montesino-Pouzols F., Leader-Williams N., Slotow R., Goodman P.S., Conway A.J., Moilanen A., 'Identification of policies for a sustainable legal trade in rhinoceros horn based on population projection and socioeconomic models', in: 29 *Conservation Biology*, no. 2, 2014, pp. 545-555.
8. Emslie R., *Ceratotherium simum*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/4185/0>, accessed 23 March 2016.
9. Foose T.J., van Strien N., *Asian rhinos: status survey and conservation action plan*. Vol. 32. IUCN, 1997
10. Groves C.P., Fernando P., Robovský J., 'The Sixth Rhino: A Taxonomic Re-Assessment of the Critically Endangered Northern White Rhinoceros', in: 5 *PLoS ONE*, no. 4, 2010.
11. Groves C.P., 'Ceratotherium simum', in: 8 *Mammalian Species*, 1972, pp 1-6.
12. Groves C.P., Leslie D.M., 'Rhinoceros sondaicus (Perissodactyla: Rhinocerotidae)', in: 43 *Mammalian Species*, no. 887, 2011, pp 190-208.
13. Groves C.P., Kurt F., 'Dicerorhinus sumatrensis', in: 21 *Mammalian Species*, 1972, pp. 1-6.
14. Groves C.P., Kes Hillman-Smith A.K., 'Dicerorhinus bicornis', in: 455 *Mammalian Species*, 1994, pp. 1-8.
15. Green Martinez S.A., 'Locus Standi Before the International Court of Justice for Violations of the World Heritage Convention', in: 5 *Transnational Dispute Management*, 2013.
16. Green Martinez S.A., 'Destruction of Cultural Heritage in Northern Mali: A Crime Against Humanity?', in: 13 *Journal of International Criminal Justice*, no. 5, 2015, pp. 1073-1097.
17. Haryono M., Rahmat U.M., Daryan M., Raharja A.S., 'Monitoring of the Javan rhino population in Ujung Kulon National Park, Java', in: 56 *Pachyderm*, 2015, pp. 82-86.

18. Koester V., 'The Biodiversity Convention Negotiation Process And Some Comments on the Outcome', in: 27 *Environmental Policy & Law*, no. 3, 1997, pp. 175-191.
19. Laurie W.A., Lang E.M., Groves C.P., 'Rhinoceros unicornis', in: 211 *Mammalian Species*, 1983, pp. 1-6.
20. Lahkar B.P., Talukdar B.K., Sarma P., 'Invasive species in grassland habitat: an ecological threat to the greater one-horned rhino (*Rhinoceros unicornis*)', in: 49 *Pachyderm*, 2011, pp. 33-39.
21. Lostal M., 'Syria's World Cultural Heritage and Individual Criminal Responsibility', in: 2015 *International Review of Law*, no. 3, 2015, pp. 1-17.
22. Milliken, T., Emslie, R. H., & Talukdar, B. (2009, November). African and Asian rhinoceroses—status, conservation and trade. In *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* (Vol. 9).
23. Milliken T., 'Illegal Trade in Ivory and Rhino Horn: An Assessment to Improve Law Enforcement Under the Wildlife Traps Project', 2014, *TRAFFIC*, <https://www.usaid.gov/sites/default/files/documents/1865/W-TRAPS-Elephant-Rhino-report.pdf>, accessed 15 June 2016.
24. Miliken T., Shaw J., 'The South Africa- Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses corrupt wildlife industry professionals and Asian crime syndicates', 2012, *TRAFFIC*, http://www.npr.org/documents/2013/may/traffic_species_mammals.pdf, accessed 15 June 2016.
25. Morgera E., Tsioumani E., 'Yesterday, Today and Tomorrow: Looking Afresh at the Convention on Biological Diversity', *University of Edinburgh School of Law Working Paper*, no. 2011/21, 2011.
26. McGraw D.M., 'The CBD – Key Characteristics and Implications for Implementation', in: 11 *Review of European Community & International Environmental Law*, no. 1, pp. 17-29.
27. Norman Owen-Smith R., 'The Social Ethology of the White Rhinoceros', in: 38 *Zeitschrift für Tierpsychologie*, no. 4, 1975, pp 337-384.
28. Norman Owen-Smith R., 'Territoriality in the White Rhinoceros', in: 231 *Nature*, no. 5301, 1971, pp 294-296.
29. Polet G., Van Mui T., Xuan Dang N., Huu Manh B., Baltzer M., 'The Javan Rhinos, *Rhinoceros sondaicus annamiticus*, of Cat Tien National Park, Vietnam: Current Status and Management Implications', in: 27 *Pachyderm*, 1999, pp. 34-48.
30. Reilly S.B., Bannister J.L., Best P.B., Brown M., Brownell R.L., Butterworth D.S., Clapham P.J., Cooke J., Donovan G.P., Urbán J., Zerbini A.N., *Balaenoptera musculus*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/2477/0>, accessed 16 June 2016.
31. Ritchie A.T.A., 'The Black Rhinoceros (*Diceros Bicornis* L.)', in: 1 *African Journal of Ecology*, no. 1. 1963, pp. 54-62.
32. Rookmaaker K., 'Records of the Sundarbans Rhinoceros (*Rhinoceros sondaicus inermis*) in India and Bangladesh', in: 24 *Pachyderm*, 1997, pp. 37-45.
33. Robbins M., Williamson L., *Gorilla beringei*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/39994/0>, accessed 15 June 2016.
34. Van Strien N.J., Manullang B., Sectionov, Isnan W., Khan M.K.M., Sumardja E., Ellis S., Han K.H., Boeadi, Payne J., Bradley Martin E., *Dicerorhinus sumatrensis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/6553/0>, accessed 15 June 2016.

35. South N., Wyatt T., 'Comparing Illicit Trades in Wildlife and Drugs: An Exploratory Study', in: 32 *Deviant Behavior*, no.6, 2011, pp 538-561.
36. 't Sas-Rolfes M., Fitzgerald T., 'Can a legal horn trade save rhinos? ', *PERC Research Paper*, no. 13-6, 2013.
37. Sapkota L., 'Ecology and management issues of Mikania micrantha in Chitwan National Park, Nepal', in: 17 *Banko Janakari*, no. 2, 2007, pp 27-39.
38. Trouwborst A., 'Global large carnivore conservation and international law', in: 24 *Biodiversity and Conservation*, no. 7, 2015, pp. 1567-1588.
39. Trouwborst A., 'Transboundary Wildlife Conservation in A Changing Climate: Adaptation of the Bonn Convention on Migratory Species and Its Daughter Instruments to Climate Change', in: 4 *Diversity*, no. 3, 2012, pp. 259-300.
40. Talukdar B.K., Emslie R., Bist R., Choudhury S.S., Ellis S., Bonal B.S., Malakar M.C., Talukdar B.N., Barua M., *Rhinoceros unicornis*, The IUCN Red List of Threatened Species 2008, <http://www.iucnredlist.org/details/19496/0> , accessed 15 June 2016.
41. Tinker C., 'A "New Breed" of Treaty: The United Nations Convention on Biological Diversity', in: 13 *Pace Environmental Law Review*, no. 1, 1995, pp. 191- 218.
42. Verschuuren J.M., 'Ramsar Soft Law is Not Soft at All. Discussion of the 2007 Decision by the Netherlands Crown on the Lac Ramsar Site on the Island of Bonaire', in: 35 *Milieu en Recht*, no. 1, 2008, pp. 28-34.
43. Wold C., 'World Heritage Species: A New Legal Approach to Conservation', in: 20 *Georgetown International Environmental Law Review*, no. 3, 2008, pp. 337-396.
44. Wold C., 'The Status of Sea Turtles under International Environmental Law and International Environmental Agreements', in: 5 *Journal of International Wildlife Law & Policy*, no. 1-2, 2002, pp. 11-48.
45. Woodroffe R., Sillero-Zubiri C., *Lycaon pictus*, The IUCN Red List of Threatened Species 2012, <http://www.iucnredlist.org/details/12436/0>, accessed 16 June 2016.
46. Young S., 'Contemporary Issues of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate Over Sustainable Use', in: 14 *Colorado Journal of International Environmental Law and Policy*, no. 1, 2003, pp. 167-190.

Textbooks

1. Aust. A., *Modern Treaty Law and Practice*, (2nd ed. Cambridge University Press New York 2007).
2. Baakman K., *Testing times: the effectiveness of five international biodiversity-related conventions*, (1st ed. Wolf Legal Publishers Utrecht 2011).
3. Birnie P., Boyle A., Redgwell C., *International Law and the Environment*, (2nd ed. Oxford University Press New York 2002).
4. Bowman M., Davies P., Redgwell C., *Lyster's International Wildlife Law*, (2nd ed. Cambridge University Press Cambridge 2010).
5. Glowka L., Burhenne-Guilmine F., Synge H., McNeely J.A., Gündling L., *A guide to the Convention on Biological Diversity*, (3rd ed. IUCN, Gland, Switzerland and Cambridge, UK 1994).
6. Henkin L., *How Nations Behave: Law and Foreign Policy*, (2nd ed. Columbia University Press, New York 1979).

7. Nowak R.M., *Walker's mammals of the world*, (6th ed. The Johns Hopkins University Press, Baltimore, 1999).
8. Van Heijnsbergen, *International Legal Protection of Wild Fauna and Flora*, (1st ed. IOS Press Amsterdam 1997).

List of legal instruments

Conventions

- Vienna Convention on the Law of Treaties (adopted 23 May 1969; entered into force 27 January 1980) 1155 UNTS 333 (Vienna Convention).
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (adopted 2 February 1971; entered into force 21 December 1975) 996 UNTS 245 (Ramsar Convention).
- Convention Concerning the Protection of the World Cultural and Natural Heritage (adopted 16 November 1972; entered into force 17 December 1975) 1037 UNTS 151 (World Heritage Convention).
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973; entered into force 1 July 1975) 993 UNTS 243 (CITES).
- Convention on the Conservation of Migratory Species of Wild Animals (adopted 23 June 1979; entered into force 1 November 1983) 1651 UNTS 333 (Bonn Convention).
- Convention on Biological Diversity (adopted 5 June 1992; entered into force 29 December 1993) 1760 UNTS 79 (CBD).

Agreements

- Agreement on Conservation of Polar Bears (adopted 15 November 1973; entered into force 26 May 1976) 27 UST 3918 (Polar Bear Agreement).
- Agreement on the Conservation of Seals in the Wadden Sea (adopted 16 October 1990; entered into force 16 October 1994) 2719 UNTS.
- Agreement on the Conservation of European Bats (adopted 4 December 1991; entered into force 16 January 1994) UNTS 1863 (EUROBATS).
- Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (adopted 17 March 1992; entered into force 29 March 1994) 1772 UNTS 217 (ASCOBANS).
- Agreement on the Conservation of Albatrosses and Petrels (adopted 19 June 2001; entered into force 1 February 2004) UNTS 2258 (Albatros Agreement).
- Agreement on the Conservation of Gorillas and their Habitats (adopted 26 October 2007; entered into force 1 June 2008) UNTS 2545 (Gorilla Agreement).

Memoranda of understanding

- Memorandum of Understanding concerning Conservation and Restoration of the Bukhara Deer (*Cervus elaphus bactrianus*) (adopted 16 May 2002; entered into force 1 August 2002).
- Memorandum of Understanding concerning Conservation Measures for the West African Populations of the African Elephant (adopted 22 November 2005; entered into force 22 November 2005).
- Memorandum of Understanding concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope (*Saiga tatarica tatarica*) (adopted 24 September 2006; entered into force 24 September 2006).