

The War Against Poaching in Africa: Learning from our mistakes

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I. Introduction

The African elephant and rhino have long struggled to maintain their populations, which saw a devastating decline during the 1980s.¹ With commercial poaching running rampant, the eye of the international community fell upon the lack of conservation policies implemented in African nations. Elephants and rhinos became icons of the conservation movement and more significantly, the keystones of Africa's wildlife safari industry. As a result of declining populations, trade in both animals was regulated by the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).²

Despite the value they have to conservationists in the West, the reality is very different for those living next door to these animal populations.³ Southern African countries have fought hard against a total ban on trade in ivory, for it has the potential to generate much-needed revenue and fund conservation programs.⁴ Opponents fear resurgence in commercial poaching for ivory and vehemently resist any relaxation of the ivory ban and their concerns are well founded.⁵ Where elephant populations have stabilized, the black rhino has not been so lucky.⁶

As a result, non-governmental organizations have tried to implement conservation programs to combat tourism. However, a distinction is rarely made between subsistence poachers who hunt for food and commercial poachers who hunt for economic gain.⁷ Additionally, local

¹ See *infra* note 46 and note 100.

² *What is CITES?*, Convention on International Trade in Endangered Species of Wild Fauna and Flora, available at <http://www.cites.org/eng/disc/what.shtml> (last visited November 2, 2010).

³ See *infra* note 18.

⁴ See *infra* note 53 and notes 73-80.

⁵ See *infra* notes 81-83.

⁶ See *infra* note 112.

⁷ See *infra* note 128 and note 132.

communities are often misunderstood and portrayed as the enemies of wildlife⁸, but commercial poachers pose a greater threat to wildlife.⁹ With the elephant and rhino populations continually being devastated by poaching, some governments have taken extreme anti-poaching measures, even if they come at the cost of fundamental human rights.¹⁰

This paper serves to analyze the differences between subsistence and commercial poaching in the context of African elephant and rhino populations, as well as evaluate previous conservation methods taken with respect to both forms of poaching. First, a history of CITES is provided, along with the relevant regulations that have governed and continue to govern both, the elephant and rhino. Then a comparison of subsistence poaching (including trade in bushmeat), and commercial poaching is discussed, as well as the motivating factors behind both. Additionally, previous conservation methods and anti-poaching strategies are evaluated against recent proposals and subsequent legal repercussions are suggested. It is important to understand the lack of international consensus regarding the elephant and rhino and CITES regulations so that the diverging interests may be better understood. Furthermore, it is necessary to understand the extreme measures that have previously been taken by governments and conservation organizations, so that the same mistakes are not made again.

II. The History of CITES

For many years, environmental issues were viewed predominantly as domestic concerns,¹¹ and it was not until the 1970s that international cooperation was recognized as an

⁸ See *infra* note 189.

⁹ See *infra* note 124.

¹⁰ See *infra* notes 221-238.

¹¹ Mara E. Zimmerman, *The Black Market for Wildlife: Combating Transnational Organized Crime in the Illegal Wildlife Trade*, 36 VAND. J. TRANSNAT'L L. 1657, 1662 (2003).

essential element to the protection of certain species.¹² It was this recognition that gave rise to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) in 1973.¹³ CITES is a trade agreement and primarily serves to regulate trade in wildlife in order to prevent the extinction of animal and plant species.¹⁴ The primary purpose of CITES is to “ensure that international trade in specimens of wild animals and plants does not threaten their survival.”¹⁵ In order for these resources to be safeguarded for the future, CITES aims to ensure the sustainability of trade.¹⁶

Plant and animal species are divided into three appendices, depending on the degree of protection needed by a particular species. In order to determine which appendix applies to a particular species, a state is required “to make a determination [whether] trade in a particular species can continue without harm to the species, if trade must be closely regulated, or if it must stop in order to prevent extinction of that species.”¹⁷ The appendix listings are determined through science, rather than politics; therefore, it is the scientists who “define the ‘problem’ for conservation, and then suggest technical solutions to those problems.”¹⁸ It is the scientists who define what is legal and illegal, therefore, their determinations have the power to guide and determine policy outcomes.¹⁹

¹² Ruth A. Braun, *Lions, Tigers and Bears [Oh My]: How to Stop Endangered Species Crime*, 11 FORDHAM ENVTL. L. REV. 545, 547 (2000).

¹³ *What is CITES?*, Convention on International Trade in Endangered Species of Wild Fauna and Flora available at <http://www.cites.org/eng/disc/what.shtml> (last visited November 2, 2010).

¹⁴ *Id.*; See also, HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 1096 (3d ed. 2007).

¹⁵ *What is CITES?*, Convention on International Trade in Endangered Species of Wild Fauna and Flora available at <http://www.cites.org/eng/disc/what.shtml> (last visited November 2, 2010).

¹⁶ *Id.*

¹⁷ Zimmerman, *supra* note 11, at 1663.

¹⁸ ROSALEEN DUFFY, NATURE CRIME: HOW WE’RE GETTING CONSERVATION WRONG 48 (2010) [hereinafter DUFFY, NATURE CRIME].

¹⁹ *Id.*

Those species listed on Appendix I are threatened with extinction and already are or will be affected by trade;²⁰ as a result, these species receive the highest protection and international regulation of trade is typically prohibited for commercial purposes to avoid extinction.²¹ However, it is still possible for an exporting and importing country to issue appropriate permits and consent to the international trade of Appendix I species.²² Species placed on Appendix II are those that are likely to become endangered unless trade is restricted.²³ For the purposes of sustainable development, trade in these species is carefully controlled so as to ensure that the species do not become further threatened.²⁴ Those species placed on Appendix III are the least endangered and receive the lowest protection.²⁵ Though they are not expected to become endangered, they are listed at the request of one or more CITES parties who desire regulation of the trade in that species.²⁶

CITES was intended to be a self-regulating treaty, where member states are responsible for the protection of wildlife through national legislation that implements the provisions of the treaty.²⁷ In its preamble, CITES states that “peoples and States are and should be the best protectors of their own wild fauna and flora.”²⁸ Additionally, according to the preamble, it is especially important to protect endangered species because they are irreplaceable.²⁹

²⁰ See, Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 [hereinafter CITES].

²¹ HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 1096-97 (3d ed. 2007).

²² HUNTER, at 1108-09.

²³ CITES, *supra* note 20, at Art. II.

²⁴ Zimmerman, *supra* note 11, at 1663.

²⁵ Joseph R. Berger, *The African Elephant, Human Economies, and International Law: Bridging a Great Rift for East and Southern Africa*, GEO. INT'L ENVTL. L. REV. 418, 422 (2001).

²⁶ *Id.* at 422; See also, HUNTER, *supra* note 21, at 1098.

²⁷ Zimmerman, at 1664.

²⁸ CITES.

²⁹ *Id.*

CITES is often regarded as the most comprehensive international conservation treaty and it aims to “balance the interests of preserving wildlife with the interests of nations, mostly developing nations, in using their natural resources to further their economic development.”³⁰ Though the treaty strives to afford member states the responsibility of implementing national legislations in compliance with CITES, it is the lack of national legislation in specific member countries throughout the world that is often seen as diminishing the effectiveness of the treaty.³¹

Additionally, CITES is often criticized as being an ineffective mechanism for the monitoring of illegal wildlife trade.³² This is in part due to the fact that despite being an international convention, CITES is incredibly reliant upon national-level enforcement and monitoring.³³ The convention also fails to make the trade in illegal wildlife a crime, and does not provide effective criminal penalties against violators.³⁴ As CITES lacks a direct mechanism for global enforcement of the treaty’s provisions and rules,³⁵ the burden falls heavily on member states to adopt national legislation that enforce the provisions and commitments of the treaty.³⁶ Additionally, though member states are to report cases of noncompliance to the CITES Secretariat,³⁷ there are no sanctions or mechanisms provided by CITES to enforce compliance.³⁸

In practice, however, many member states are unable to enforce wildlife trade laws at a national level therefore, any penalties associated with the laws are an ineffective deterrence

³⁰ Zimmerman, at 1662.

³¹ Zimmerman, *supra* note 11, at 1665.

³² Liana S. Wyler & Pervaze A. Sheikh, *International Illegal Trade in Wildlife: Threats and U.S. Policy*, Congressional Research Service Report for Congress 29 (March 3, 2008) [hereinafter CRS Report].

³³ DUFFY, *NATURE CRIME*, *supra* note 18, at 47.

³⁴ CRS Report, *supra* note 23, at 29.

³⁵ Mario Del Baglivo, *CITES at the Crossroad: New Ivory Sales and Sleeping Giants*, 14 *FORDHAM ENTL. L. REV.* 279, 279 (2003).

³⁶ CRS Report, at 29.

³⁷ *Id.*

³⁸ Baglivo, at 279.

against potential wildlife criminals.³⁹ One method for addressing violations of the treaty is for the CITES Secretariat to notify “informing member states to suspend trade in CITES-listed species with noncompliant countries.”⁴⁰ However, the extent to which these suspensions are actually carried out by member states is unclear, for the treaty operates primarily through a reporting procedure.⁴¹

The main decision-making body of CITES is the Conference of the Parties (CoP), and it comprises of all Parties.⁴² The CoP meets every three years to review the implementation of the Convention and its provisions.⁴³ These meetings last for about two weeks and are usually hosted by one of the Parties; they are also largely aided and attended by nonprofit organizations.⁴⁴ Additionally, by a two-thirds vote of the parties that are present at the CoP, species can be transferred from one Appendix to another.⁴⁵ Trade in African elephant and rhino parts are regulated by CITES and both animals were at some point in time placed on Appendix I. There has been a lack of consensus amongst the international community as to whether or not a complete ban on trade in these animals is the most effective long-term solution to increasing their populations.

a) The faltering status of elephant populations and regulations imposed by CITES

Throughout the 1980s, the international community saw a dramatic decline in African elephant populations, and though it may in part have been attributed to habitat loss, it was more

³⁹ CRS Report, at 29.

⁴⁰ *Id.*

⁴¹ CRS Report, *supra* note 32, at 29.

⁴² *What is CITES?*, Environmental Investigation Agency, March 11, 2010, available at <http://www.eia-international.org/cgi/background/background.cgi?t=template&a=30> (last visited November 5, 2010).

⁴³ *Id.*

⁴⁴ *What is CITES?*, Environmental Investigation Agency, March 11, 2010, available at <http://www.eia-international.org/cgi/background/background.cgi?t=template&a=30> (last visited November 5, 2010).

⁴⁵ Berger, *supra* note 25, at 422.

significantly impacted by the increase in poaching for elephant ivory.⁴⁶ It is estimated that in African countries, the population of elephants fell from 1.3 million to under 600,000 during the 1980s.⁴⁷ Other contributing factors to the population decline were thought to be unstable economies, political corruption in some nations, a greater availability to automatic weapons, and the need for new sources of foreign exchange.⁴⁸

In order to address the plummeting numbers, a new system was adopted at the 1985 CoP, whereby each African country was required “to set quotas for the number of elephants killed annually,”⁴⁹ as well as for allowed exports of un-worked ivory.⁵⁰ This attempt essentially failed, for it was believed that almost “three-fourths of the first year’s legal quota trade in 1986” was illegally poached.⁵¹ However, it was not until four years after this failed attempt, at the 1989 CoP, that the African elephant was finally placed on Appendix I, and a complete ban on the commercial trade of ivory was implemented.⁵² Though the ivory trade ban was supported by a majority of African nations, there was some resistance by Southern African countries.⁵³ Conservationist NGOs also played a vital role in the campaign against trade in ivory.⁵⁴ For instance, NGOs drafted reports outlining the devastating decline in elephant populations

⁴⁶ HUNTER, *supra* note 21, at 1108; *See also*, Amboseli Trust for Elephants, *Elephant Poaching and the Ivory Trade* (Jan. 2010), available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010).

⁴⁷ *See generally*, DUFFY, NATURE CRIME, *supra* note 18.

⁴⁸ HUNTER, *supra* note 21, at 1108.

⁴⁹ *Id.*

⁵⁰ *Id.*; *See also* Berger, *supra* note 25, at 423.

⁵¹ Berger, at 423.

⁵² HUNTER, at 1109; *See also*, Berger at 423.

⁵³ Berger, at 427. (The four Southern African nations that opposed a complete ban were Botswana, Zimbabwe, South Africa and Mozambique); *See also*, DUFFY, NATURE CRIME, *supra* note 18, at 139-140. (Eventually a compromise was reached that allowed states to take out a reservation to the ban; whereby they would be allowed to apply to have the African elephant downgraded to Appendix II if they were able to prove that their elephant populations were being managed).

⁵⁴ DUFFY, NATURE CRIME, at 126.

throughout Africa, and presented convincing arguments that CITES was undermining its own provisions by not taking action to prevent the extinction of the African elephant.⁵⁵

In many ways, the outright ban on the trade in ivory was incredibly successful, for it not only brought illegal poaching to an end, but also ended the demand for ivory in Europe and the United States.⁵⁶ There was a reported resurgence in elephant populations across Southern African countries, such as South Africa, Botswana, Zambia and Zimbabwe.⁵⁷ Additionally, the ban successfully reduced the demand for ivory in Europe and the United States.⁵⁸ Throughout the world, the price of ivory dropped and with it, the allure of potential profits from the sale of elephant ivory products.⁵⁹

Global publicity was a subsequent effect of the ivory ban. The market for ivory products diminished substantially as the ban raised the consciousness of potential ivory buyers.⁶⁰ It became unconscionable to purchase ivory, and many observers argue that the ban was successful in changing people's perception of the value of ivory and elephants.⁶¹ In a dramatic attempt to demonstrate its commitment to the conservation of elephants, President Moi of Kenya famously set fire to twelve tons of ivory that had been stockpiled in Kenya.⁶² Though the 2,500 seized tusks⁶³ could have sold for about three million dollars on the open market, the act of burning the ivory essentially showed the world that Kenya was truly committed to the plight of the elephants.⁶⁴

⁵⁵ DUFFY, NATURE CRIME, *supra* note 18, at 128.

⁵⁶ Berger, *supra* note 25, at 427.

⁵⁷ HUNTER, *supra* note 21, at 1108; *See also*, Baglivo, *supra* note 35, at 279.

⁵⁸ Berger, at 427.

⁵⁹ Baglivo, at 279.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² DUFFY, NATURE CRIME, at 134; *See also*, HUNTER, at 1109.

⁶³ HUNTER, at 1109.

⁶⁴ DUFFY, NATURE CRIME, at 134-35.

Due to a rise in elephant populations, African countries began elephant culls through selective thinning to avert land degradation and sustain the carrying capacity of their habitat.⁶⁵ Culling operations were highly controversial, for it often disrupted the structure of elephant herds and led to the killing of entire family groups in order to minimize disruption.⁶⁶ As a direct result of the interdiction of poachers⁶⁷ and culling operations⁶⁸, many African nations had stockpiled ivory, including ivory from the natural deaths of elephants.⁶⁹ These nations were forced to sit on their stockpiles, which sometimes equaled up to 470 tons of ivory.⁷⁰ Furthermore, governments not only had to store the ivory in humidified conditions, but also had to pay to protect it from theft.⁷¹ These countries were unable to sell their stockpiled ivory even if the proceeds of a sale were to be used towards anti-poaching efforts, development funds, or compensation to villagers whose property had been damaged by elephants.⁷²

In 1997, emphasizing their positive conservation records, Botswana, Namibia and Zimbabwe were permitted to transfer their elephant populations from Appendix I to Appendix II.⁷³ Additionally the three countries believed “that a total ban on selling confiscated ivory would hurt their abilities to fund conservation”⁷⁴ and therefore, they sought an experimental sale of their stockpiled ivory to Japan.⁷⁵ There was a great deal of controversy surrounding both the transfer to Appendix II and the experimental consignment.⁷⁶ Proponents of the one-time sale,

⁶⁵ HUNTER, at 1108.

⁶⁶ DUFFY, NATURE CRIME, *supra* note 18, at 145.

⁶⁷ Baglivo, *supra* note 35, at 279.

⁶⁸ DUFFY, NATURE CRIME, at 145.

⁶⁹ Baglivo, at 279.

⁷⁰ HUNTER, *supra* note 21, at 1109.

⁷¹ Baglivo, at 279.

⁷² HUNTER, at 1109.

⁷³ Andrew M. Lemieux & Ronald V. Clarke, *The International Ban on Ivory Sales and its Effects on Elephant Poaching in Africa*, 49 BRIT. J. CRIMINOLOGY 451, 454 (2009).

⁷⁴ *Id.*

⁷⁵ HUNTER, at 1109.

⁷⁶ *Id.*

such as South Africa, argued that the revenue generated would allow local populations to feel as though elephant conservation was in their best economic self-interest.⁷⁷ Additionally, the Southern African countries argued that the real responsibility of endangered species management fell upon the local communities who would have most benefitted by exploiting the resources and poaching.⁷⁸ Therefore, not only should they be rewarded for their conservation achievements,⁷⁹ but also allowing elephants to “pay their way” is a more effective long-term solution to ensuring their survival.⁸⁰

These arguments were met with much criticism. For instance, the United States and Kenya opposed the transfer to Appendix II in fear that it, once again, could open the door to commercial poaching.⁸¹ There was a concern that once the ivory had been worked, no distinction could be made between poached ivory and ivory that had come from managed herds, so it would be difficult to monitor the sale.⁸² Opponents also emphasized that through “eco-tourism” and international aid, economic development could be provided to local communities in order to create a shared sense of value in local elephant herds.⁸³

After much debate, Botswana, Namibia and Zimbabwe were permitted a one-time experimental sale of 59 tons of ivory to Japan,⁸⁴ which was subject to several conditions.⁸⁵ For instance, any previously identified deficiencies in enforcement and control measures had to be modified, the consignment could not contain poached ivory, and any reservations that the three

⁷⁷ HUNTER, *supra* note 21, at 1109

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Elephant Poaching 'Rife in Central Africa,'* BBC NEWS (Oct. 22, 2002), available at <http://news.bbc.co.uk/2/hi/africa/2353865.stm> (last visited Nov. 20, 2010).

⁸¹ HUNTER, at 1109.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*; See also, Berger, *supra* note 25, at 418.

⁸⁵ Lemieux, *supra* note 73, at 454.

countries had to the Appendix I listing had to be removed.⁸⁶ Furthermore, the net revenues from the experimental consignment must be directed towards elephant conservation activities.⁸⁷

After all the conditions were met, 49,574 kg of ivory (5,446 tusks) was sold to Japan for approximately five million dollars.⁸⁸ All proceeds were to be used for elephant conservation in Botswana, Namibia and Zimbabwe, and future sales would not be allowed without the approval of a two-thirds majority of the Parties to CITES.⁸⁹ The sale was deemed a success, for it generated much-needed revenue for the three countries without prompting a significant increase in elephant deaths.⁹⁰ However, many believed that the sale had led to an inevitable increase in poaching, where poachers were building stockpiles of ivory in anticipation of renewed trade.⁹¹ Statistical data also showed an increase in poaching after the consignment to Japan. For instance, in 1999, poachers in Kenya's Tsavo National Park killed twenty-nine elephants. Recorded ivory seizures in Kenya also increased 400 per cent; and it was estimated that the price of ivory increased from \$22 before the sale to about \$300 in the year after the sale.⁹²

A subsequent analysis of the sale at the 2000 CoP showed “that the sale had not served as an opportunity for the laundering of poached ivory,” nor had the three countries manipulated “legal” sources of ivory in an attempt to increase the government stockpile prior to the sale.⁹³ As a result of the supposed success, South Africa was also permitted to transfer its elephant population from Appendix I to Appendix II.⁹⁴ Despite this supposed success, future ivory sales

⁸⁶ HUNTER, at 1109-10.

⁸⁷ HUNTER, at 1110.

⁸⁸ HUNTER, *supra* note 21, at 1110.

⁸⁹ Baglivo, *supra* note 35, at 279.

⁹⁰ *Id.*

⁹¹ *Id.* (This data was provided in a report by the International Fund for Animal Welfare).

⁹² *Id.*

⁹³ *Id.*

⁹⁴ Amboseli Trust for Elephants, *Elephant Poaching and the Ivory Trade* (Jan. 2010), available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010).

were delayed so that an effective system could be created in order to prevent the widespread poaching of elephants.⁹⁵ However, this did not mean that poaching was not rampant in some African nations. In 2002, authorities in Singapore seized the largest shipment of ivory since the 1989 ban.⁹⁶ Subsequent DNA analysis showed that the ivory had originated in Zambia and further investigation showed the shipment was destined for Japan.⁹⁷

By the 2007 CoP, Kenya proposed a twenty-year moratorium on the ivory trade, however, it was again met with much opposition.⁹⁸ Eventually a compromise was reached between pro-trade Parties, and a nine-year moratorium was imposed.⁹⁹ Its purpose was to provide a “resting period” during which no further ivory trade proposals could be presented to the CoP for consideration.¹⁰⁰ Despite the imposition of the moratorium, Botswana, Namibia, South Africa and Zimbabwe were permitted one more sale of government owned stocks.¹⁰¹ The sale took place in 2008 and 108 tons of ivory went to Japan and China.¹⁰² There was a great deal of concern that the sale would rekindle an appetite for ivory, particularly in Asian countries, and the prediction has thus far been correct.¹⁰³

⁹⁵ Baglivo, at 279.

⁹⁵ *Id.*

⁹⁶ Amboseli Trust for Elephants, *Elephant Poaching and the Ivory Trade* (Jan. 2010), available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010). (The shipment comprised of “532 elephant tusks and more than 40,000 cut pieces of ivory.” It totaled 6.5 tons of ivory).

⁹⁷ *Id.*

⁹⁸ Amboseli Trust for Elephants, *The African Elephant Coalition* (Jan. 2010); available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010).

⁹⁹ *Id.*

¹⁰⁰ Amboseli Trust for Elephants, *CITES and the Ivory Trade* (Jan. 2010); available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010).

¹⁰¹ *Id.*

¹⁰² Amboseli Trust for Elephants, *Elephant Poaching and the Ivory Trade* (Jan. 2010), available at <http://www.elephanttrust.org/node/618> (last visited Nov. 19, 2010).

¹⁰³ *Id.*

b) Dwindling rhino populations and regulations under CITES

During the second half of the twentieth century, the population of black rhinos in Africa saw a devastating decline.¹⁰⁴ It was estimated that 70,000 rhinos survived in the late 1960s and this number decreased to 2,475 by 1933.¹⁰⁵ There were several causes for the declining population, including an increase in agriculture and human settlement,¹⁰⁶ political instability, poverty, corruption and greed.¹⁰⁷ However, the two causes most credited for the decline are the demand for powdered rhino horn to be used in Traditional Chinese Medicine (TCM),¹⁰⁸ and for the carving of traditional ornamental dagger handles in Yemen.¹⁰⁹ As a result, a poaching crisis ensued between the 1970s and 1980s and rhino populations were almost entirely devastated.¹¹⁰ It was not until 1977 that the black rhino was placed on Appendix I of CITES and the international commercial trade in rhino parts was completely prohibited.¹¹¹

Despite being placed on Appendix I, rhino populations still did not stabilize. A minimum of 470 rhinos were reportedly poached in seven rhino range States between January 2006 and

¹⁰⁴ WWF, *WWF Factsheet: Black Rhinoceros*, 2 (2004), available at <http://assets.panda.org/downloads/ecop13blackrhinofactsheet.pdf> (last visited Nov. 20, 2010).

¹⁰⁵ WWF, *WWF Factsheet: Black Rhinoceros*, 2 (2004), available at <http://assets.panda.org/downloads/ecop13blackrhinofactsheet.pdf> (last visited Nov. 20, 2010).

¹⁰⁶ *Id.*

¹⁰⁷ WWF, *History and threats to the black rhino*, available at http://wwf.panda.org/what_we_do/where_we_work/project/projects_in_depth/kwazulu/area/species/black_rhino_history.cfm (last visited Nov. 20, 2010).

¹⁰⁸ WWF, *WWF Factsheet: Black Rhinoceros*, 2 (2004), available at <http://assets.panda.org/downloads/ecop13blackrhinofactsheet.pdf> (last visited Nov. 20, 2010). (The rhino horn is said to have healing powers and is a popular ingredient in the practice of Traditional Chinese Medicine).

¹⁰⁹ DUFFY, *NATURE CRIME*, *supra* note 18, at 117.

¹¹⁰ WWF, *History and threats to the black rhino*, available at http://wwf.panda.org/what_we_do/where_we_work/project/projects_in_depth/kwazulu/area/species/black_rhino_history.cfm (last visited Nov. 20, 2010).

¹¹¹ WWF, *WWF Factsheet: Black Rhinoceros*, 3 (2004), available at <http://assets.panda.org/downloads/ecop13blackrhinofactsheet.pdf> (last visited Nov. 20, 2010).

September 2009.¹¹² Rhino populations suffered a major upsurge in poaching, and eventually hit a fifteen-year high in 2009.¹¹³ According to conservationists, a decline in effective law enforcement contributed to the increase in poaching intensity in African countries.¹¹⁴ There has been a significant decline in the number of rhinos dying for bushmeat, primarily through snaring.¹¹⁵ Instead, this has been replaced by targeted poaching for rhino horn and guns are used in the areas where snaring formally occurred.¹¹⁶

Action was finally taken at the Fifteenth CoP in March 2010, where rhino range countries agreed to strengthen border controls, increase law enforcement, train guards, improve the mechanisms necessary to monitor rhino populations and create campaigns to raise awareness in consumer countries.¹¹⁷ Additionally, a commitment was made to root out organized crime syndicates believed to be behind the increase in poaching and illegal trade.¹¹⁸ Almost all of the black rhinos in the wild are found in Kenya, Namibia, South Africa and Zimbabwe, and the current population is estimated to be 3,600.¹¹⁹ However, anti-poaching policies have done little to help the rhino populations and poaching continues at an unprecedented rate, with more than

¹¹² Fifteenth Conference of the Parties, *African and Asian Rhinoceroses – Status, Conservation and Trade*, 3, CoP15 Doc. 45.1 (Nov. 20, 2009), available at <http://www.cites.org/common/cop/15/doc/E15-45-01A.pdf> (last visited Nov. 21, 2010) [hereinafter Fifteenth CoP].

¹¹³ Press Release, WWF, CITES Throws a Lifeline to Rhinos Amid Global Poaching Crisis (Mar. 22, 2010), available at <http://www.worldwildlife.org/who/media/press/2010/WWFPresitem15734.html> (last visited Nov. 20, 2010).

¹¹⁴ “Global surge” in Rhino Poaching, BBC NEWS (Dec. 1, 2009), available at <http://news.bbc.co.uk/2/hi/science/nature/8388606.stm> (last visited Nov. 20, 2010).

¹¹⁵ Fifteenth CoP, *supra* note 112.

¹¹⁶ *Id.*

¹¹⁷ Press Release, WWF, CITES Throws a Lifeline to Rhinos Amid Global Poaching Crisis (Mar. 22, 2010), available at <http://www.worldwildlife.org/who/media/press/2010/WWFPresitem15734.html> (last visited Nov. 20, 2010).

¹¹⁸ *Id.*

¹¹⁹ WWF, *History and threats to the black rhino*, available at http://wwf.panda.org/what_we_do/where_we_work/project/projects_in_depth/kwazulu/area/species/black_rhino_history.cfm (last visited Nov. 20, 2010).

150 rhinos killed in the first eight months of this year.¹²⁰ Much of the poaching takes place in private game reserves, and this year saw the last of the female rhinos in South Africa killed by commercial poachers.¹²¹

III. Subsistence poaching versus Commercial Poaching: Is there a difference?

International conservation organizations have always played a crucial role in defining why and how poaching occurs.¹²² However, rarely has a distinction been made between the subsistence and commercial use of wildlife.¹²³ According to Paul Elkan, an American biologist who directs the Wildlife Conservation Society (WCS) program in southern Sudan, there is a big difference “between a man who leaves his hut in the morning with a spear in his hand . . . and commercial hunters coming down from the north to poach game.”¹²⁴ Anti-poaching strategies and conservation programs tend to group the two together, and as a result, the motivating factors for both are regarded as the same.¹²⁵ Additionally, it is often forgotten that the primary responsibility for endangered species management falls not to central governments, but to local communities,¹²⁶ therefore, it is necessary to tailor conservation methods appropriately.

It is important to distinguish the motivating factors between subsistence poachers and commercial poachers, for they do not necessarily present the same threat to wildlife.¹²⁷

¹²⁰ *Rhino Poaching on the increase in South Africa*, BBC NEWS (Aug. 17, 2010), available at <http://www.bbc.co.uk/news/world-africa-10999487> (last visited Nov. 20, 2010).

¹²¹¹²¹ Alex Duval Smith, *Poachers Kill Last Female Rhino in South African Park for Prized Horn*, THE GUARDIAN (July 18, 2010), available at <http://www.guardian.co.uk/environment/2010/jul/18/poachers-kill-last-female-rhino> (last visited Nov. 20, 2010).

¹²² DUFFY, NATURE CRIME, *supra* note 18, at 80.

¹²³ ROSALEEN DUFFY, KILLING FOR CONSERVATION: WILDLIFE POLICY IN ZIMBABWE 44 (2000) [hereinafter KILLING FOR CONSERVATION].

¹²⁴ Matthew Teague, *Great Migrations: The Lost Herds of Southern Sudan*, NATIONAL GEOGRAPHIC, Nov. 2010, at 60-61.

¹²⁵ DUFFY, KILLING FOR CONSERVATION, *supra* note 123, at 44.

¹²⁶ HUNTER, *supra* note 21, at 1115.

¹²⁷ DUFFY, KILLING FOR CONSERVATION, at 44.

Subsistence poaching largely revolves around hunting for food¹²⁸, and typically relies upon the use of low-technology traps and snares.¹²⁹ As a result, subsistence poaching tends to operate on a much smaller scale and thus, has a minimal effect on animal populations.¹³⁰ The primary objective of subsistence poachers is to obtain meat for consumption,¹³¹ and therefore, they are likely to be swayed by viable economic alternatives that can be provided by community-based conservation methods.

Commercial poaching, on the other hand “can be defined as illegal extractive use of wildlife by hunters interested in financial gain.”¹³² Commercial poachers by definition, are motivated primarily by economic gain.¹³³ Therefore, anti-poaching policies that are geared towards increasing the favor of conservation practices amongst local constituencies are not likely to be effective.¹³⁴ Commercial poachers are more concerned with financial gain than they are in the sustainable utilization of wildlife.¹³⁵ Furthermore, their goals are short-term and since they are not bound by the rules of local communities¹³⁶, they are unlikely to be deterred by community-based conservation methods.

a) Subsistence Poaching and the bushmeat trade

Despite the fact that traditional subsistence poaching has not posed a significant threat to wildlife, in recent years there has been an increase in trade in bushmeat.¹³⁷ Bushmeat is defined

¹²⁸ DUFFY, KILLING FOR CONSERVATION, *supra* note 123, at 44.

¹²⁹ DUFFY, NATURE CRIME, *supra* note 18, at 87.

¹³⁰ DUFFY, KILLING FOR CONSERVATION, at 44; *See also*, DUFFY, NATURE CRIME, at 87.

¹³¹ DUFFY, KILLING FOR CONSERVATION, at 45.

¹³² DUFFY, KILLING FOR CONSERVATION, *supra* note 123, at 45.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ HUNTER, *supra* note 21, at 1119.

as “the killing of terrestrial wild animals, either legally or illegally, for consumption.”¹³⁸ Several reasons have been purported for this increase, including population growth and illegal logging.¹³⁹ Logging has long been a key source of revenue in African countries, and roads that have been cut by logging companies allow hunters to enter even deeper into forests, where biodiversity is often greatest.¹⁴⁰ Locals appear to have “shifted from subsistence and small-scale local trade to larger-scale commercial trade in ivory and game meat.”¹⁴¹ Subsistence poaching has also transformed into a larger industry as the demand for bushmeat has grown significantly.¹⁴² As a result, some argue that subsistence poaching now poses a more significant threat to wildlife and is more difficult to distinguish from commercial poaching.¹⁴³

In the past, once mammals were killed or snared, the hunters distributed the meat amongst the residents of their village.¹⁴⁴ However, in recent years the primary selection criterion for market hunters has become the size of the animal; shooting larger animals allows hunters to “maximize their carrier’s loads while minimizing their time in the bush and exposure to detection by wildlife scouts.”¹⁴⁵ As a direct result of this shifting market trend, elephants are increasingly preferred, and in particular, females and young calves.¹⁴⁶

In order to fully comprehend the motivating factors behind the trade in bushmeat and subsistence poaching, it is necessary to understand how local communities perceive hunting and wildlife. Two conservationists, Clyn Davies and David Brown, conducted a study in Northern

¹³⁸ HUNTER, *supra* note 21, at 1119.

¹³⁹ *Id.*; See generally, DUFFY, KILLING FOR CONSERVATION.

¹⁴⁰ HUNTER, *supra* note 21, at 1119.

¹⁴¹ Taylor Brown & Stuart A. Marks, *Livelihoods, Hunting and the Game Meat Trade in Northern Zambia*, in BUSHMEAT AND LIVELIHOODS: WILDLIFE MANAGEMENT AND POVERTY REDUCTION 94 (Glyn Davies & David Brown eds., 2007).

¹⁴² DUFFY, NATURE CRIME, *supra* note 18, at 91.

¹⁴³ *Id.*

¹⁴⁴ Brown, *supra* note 141, at 94.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

Zambia and interviewed twenty-six hunters who traded in bushmeat.¹⁴⁷ The purpose of the study was to assess the character and extent of hunting and trade in bushmeat and analyze the implications both might have on conservation initiatives that strive to introduce economic alternatives to such communities.¹⁴⁸ The study was comprised of ethnographic fieldwork, interviews, and case studies in several large, dispersed settlements west of the Luangwa Valley in Central Africa.¹⁴⁹

The study demonstrated that the most significant sources of income for many of the local communities in this particular area come from illegal hunting and game meat sales.¹⁵⁰ In fact, one hunter interviewed said that the difference between poachers and those who do not poach is that the poachers had necessities such as soap;¹⁵¹ whereas those who did not poach were much poorer.¹⁵² Though those that hunt are amongst the wealthiest locals, the amount of money earned through hunting is transient, and therefore, is not substantial enough to transform the standard of living for many of these villagers.¹⁵³ However, it is also important to understand that for many of these local communities, hunting has less tangible benefits such as social status.¹⁵⁴ Many of those who hunt are revered for their bravery and held in very high esteem by the rest of the community;¹⁵⁵ they are seen as the protectors of the village.¹⁵⁶

Though there are considerable risks associated with hunting, this particular case study shows that for many subsistence hunters, the economic benefits far outweigh the relatively low

¹⁴⁷ See generally, Brown *supra* note 132.

¹⁴⁸ Brown, *supra* note 141, at 92-93.

¹⁴⁹ *Id.* at 93.

¹⁵⁰ *Id.* at 92.

¹⁵¹ *Id.* at 99.

¹⁵² *Id.*

¹⁵³ *Id.* at 101.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

risk of being caught.¹⁵⁷ Oftentimes the profit from a successful hunt can be up to ten times that of the investment involved,¹⁵⁸ and for many of the boys in the village, there is little else to do but hunt.¹⁵⁹ Even though there are incidents of hunters being shot by game guards, the actions go unreported for fear of further arrests.¹⁶⁰ Despite these risks, many of the local villagers also believe that the only way for them to earn money without killing animals is for them to be paid for conserving wildlife.¹⁶¹ Currently, there is little “economic rationality for long-term investments in wildlife conservation” for many of these local populations,¹⁶² therefore, there is a chance that subsistence poaching could lead to a greater threat against wildlife in the years to come.

b) Commercial Poachers

In many cases, commercial poaching has turned environmental exploitation into a business, where the poacher is part of a much larger organized group.¹⁶³ Over the years, commercial poachers have become increasingly sophisticated and now use techniques that are less likely to attract attention, such as poison, cross bows and veterinary drugs.¹⁶⁴ As a result of

¹⁵⁷ Brown, *supra* note 141, at 102.

¹⁵⁸ *Id.* at 103.

¹⁵⁹ *Id.* at 104.

¹⁶⁰ *Id.* at 103.

¹⁶¹ *Id.* at 102-03.

¹⁶² Christopher Vaughan & Andrew Long, *Bushmeat, Wildlife Management and Good Governance: Rights and Institutional Arrangements in Namibia's Community-based Natural Resources Management Program*, in BUSHMEAT AND LIVELIHOODS: WILDLIFE MANAGEMENT AND POVERTY REDUCTION 127 (Glyn Davies & David Brown eds., 2007).

¹⁶³ UNITED NATIONS OFFICE ON DRUGS AND CRIME, *The Globalization of Crime: A Transnational Organized Crime Threat Assessment*, 152 (2010) [hereinafter UNDOC].

¹⁶⁴ UNDOC at 157; *See also*, Press Release, WWF, CITES Throws a Lifeline to Rhinos Amid Global Poaching Crisis (Mar. 22, 2010), available at <http://www.worldwildlife.org/who/media/press/2010/WWFPresitem15734.html> (last visited Nov. 20, 2010).

large organized crime units, poachers also have access to high caliber weapons,¹⁶⁵ whereas the park rangers guarding the national and private reserves have little access to such technologies.¹⁶⁶

Commercial poachers are typically “interlinked through an organized illegal system of middlemen and traders who have the capacity to move” the illicit animal products “from the places they were hunted to the places where they are finally sold.”¹⁶⁷ Additionally, commercial poaching is an attractive and lucrative occupation because of the “high-value/low-risk” associated with the lack of enforcement and high profits.¹⁶⁸ A subsequent effect of the expansion of commercial poaching and hunting in forested areas is that wildlife is not as readily available for rural communities who rely on it for food.¹⁶⁹

Some argue that poaching is not simply about “global chains of production and consumption,” but in fact, “it is also entangled with the wide political dynamics of conflict.”¹⁷⁰ Recent studies on the history of ivory poaching demonstrate that the large-scale poaching that took place in the 1980s could not have been carried out without complicity at the highest levels of government.¹⁷¹ Commercial poaching of ivory and rhino horns has run rampant in recent years, and there is a great concern that the war against poachers may never be won.

¹⁶⁵ Press Release, WWF, CITES Throws a Lifeline to Rhinos Amid Global Poaching Crisis (Mar. 22, 2010), available at <http://www.worldwildlife.org/who/media/press/2010/WWFPresitem15734.html> (last visited Nov. 20, 2010).

¹⁶⁶ African Conservation Foundation, *Kenya: Elephant Poachers Go Hi-Tech to Stay Ahead of Rangers* (Oct. 19, 2010), available at <http://www.africanconservation.org/201010191972/conservation-news-section/kenya-elephant-poachers-go-hi-tech-to-stay-ahead-of-rangers> (last visited Nov. 20, 2010); See generally, DUFFY, KILLING FOR CONSERVATION, *supra* note 123.

¹⁶⁷ DUFFY, NATURE CRIME, *supra* note 18, at 89.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.* at 93.

¹⁷⁰ *Id.* at 94.

¹⁷¹ *Id.*

IV. Conservation methods

Though illegal hunting of wildlife is driven and sustained by many dynamics, including disputes over the use of natural resources and armed conflict,¹⁷² local governments have long attempted to implement conservation mechanisms and anti-poaching policies. However, there has been little success in the war against poaching of any kind. Since the decision to place a species on Appendix I is largely based on scientific knowledge, some argue that these determinations do not take into account “social and cultural issues which may arise across countries and regions.”¹⁷³ It is almost a one-size-fits-all policy that fails to address any variations that may take place at local, national and global levels.¹⁷⁴ Rather, conservation methods that aim to address subsistence poachers are often based on assumptions of the character and extent of illegal hunting, rather than sound knowledge of the acts.¹⁷⁵ Moreover, the motivations and needs of law enforcement and hunters often go unnoticed.¹⁷⁶ Therefore, while it is important for conservation methods to provide economic incentives for the local populations, it is also necessary that they recognize and address the needs of local communities in order for them to be truly successful.

Additionally, it is argued by some that the international media tends to portray poachers as impoverished villagers motivated by greed, whereas the role of international demand and markets in wildlife products is often a secondary concern.¹⁷⁷ As a result, many anti-poaching

¹⁷² DUFFY, NATURE CRIME, *supra* note 18, at 95.

¹⁷³ *Id.* at 48.

¹⁷⁴ *Id.*

¹⁷⁵ Brown, *supra* note 141, at 103.

¹⁷⁶ *Id.*

¹⁷⁷ DUFFY, NATURE CRIME, at 96.

policies portray an emphasis on the symptoms (such as the poachers), rather than the actual causes of poaching (such as the global demand for illicit wildlife products).¹⁷⁸

a) The realities of community-based conservation?

In order for the land and wildlife to be better-protected, African nations such as Tanzania have established protected areas within their region.¹⁷⁹ However, there has been a constant struggle to maintain a healthy relationship with the indigenous populations that live within and adjacent to these protected areas.¹⁸⁰ In order to establish stronger relationships with indigenous populations, community conservation projects are often implemented in the hope that local communities can also reap the benefits from tourism in the national parks.¹⁸¹

Many community-based wildlife management (CWM) programs take an active approach to conservation and perceive local communities as active participants who are capable of participating in wildlife management activities.¹⁸² The two main components of the CWM approach are community economic development and wildlife conservation.¹⁸³ Furthermore, there are four assumptions that underlie the CWM approach: 1) that national governments and wildlife authorities are willing to allow rural communities to have ownership of, and management responsibilities for wildlife conservation; 2) that the communities are interested and willing to

¹⁷⁸ DUFFY, NATURE CRIME, *supra* note 18, at 96.

¹⁷⁹ Gregg Goldstein, *The Legal System and Wildlife Conservation: History and the Law's Effect on Indigenous People and Community Conservation in Tanzania*, 17 GEO. INT'L ENVTL. L. REV. 481, 483 (2005).

¹⁸⁰ Goldstein, at 483.

¹⁸¹ *Id.*

¹⁸² Alexander N. Songorwa etc., *Community-based Wildlife Management in Africa: A Critical Assessment of the Literature*, 40 NAT. RESOURCES J. 603, 606 (2000).

¹⁸³ Songorwa, at 609.

participate in the management of wildlife; 3) that the communities have the capacity to manage wildlife; and 4) that wildlife conservation and rural economic development can be compatible.¹⁸⁴

Governments have been reluctant to fully adopt CWM approaches to conservation for many reasons, including a fear that it could jeopardize the sport-hunting and tourism industries.¹⁸⁵ In 1994, the International Institute for Environment and Development (IIED) conducted a review of fifteen CWM programs and projects in Africa.¹⁸⁶ Results showed that some national governments perceived the CWM approach as a threat to central authority, and therefore, were unwilling to support its programs and projects.¹⁸⁷ Even governments that have reported to be “officially” committed to CWM, such as Zambia and Zimbabwe, have failed to fully subscribe to the approach.¹⁸⁸

Though there are some community management projects that have proved successful, oftentimes the reality is that the rights of local communities are usurped.¹⁸⁹ These rights are often subordinate to the “interests of tourist, sport hunters and safari operators,”¹⁹⁰ and it is made worse by the fact that during colonial times, many local communities signed away their rights to hunt during the post-colonial period.¹⁹¹ As a result, there are some scholars who do not give much credence to community-based conservation programs and in fact, come down vehemently against the efforts of conservationist NGOs. For instance, some argue that international

¹⁸⁴ Songorwa, *supra* note 182, at 603.

¹⁸⁵ *Id.* at 616.

¹⁸⁶ *Id.* at 620.

¹⁸⁷ *Id.*

¹⁸⁸ *Id.* at 618.

¹⁸⁹ DUFFY, NATURE CRIME, *supra* note 18, at 80.

¹⁹⁰ *Id.*

¹⁹¹ *Id.*; *See also*, Songorwa, *supra* note 182, at 604. (When post-colonial governments and conservationists worked to expand protected areas or establish new ones throughout Africa, local communities began to be viewed as the principal threat to wildlife. Moreover, the attention of governments and wildlife authorities alike fell upon excluding members of the community from disturbing the wildlife and protected areas).

interference in local community conservation efforts have in fact created a stereotype that local populations are enemies of wildlife and are responsible for perpetuating the illegal trade in wildlife through poaching and trade in bushmeat.¹⁹²

b) Dispelling the myths of community-based conservation: The Grumeti Fund as an example of success

However, it is important to recognize that not all conservation methods disregard the local communities surrounding private reserves or national parks. The Grumeti Fund in Tanzania is an example of a conservation method that successfully includes the local community, thereby creating economic incentives to protect the surrounding wildlife. On the northwestern boundary of the Serengeti national park in Tanzania, lie two hunting concessions, the Ikorongo Grumeti Game Reserves.¹⁹³ Previously, legal and illegal hunting had led to an unsustainable environment, whereby most of the resident game populations had dwindled.¹⁹⁴ It was not until 2002, when a private investor took over the lease, that a stronger and more active approach was taken towards protecting the wildlife and its habitat.¹⁹⁵ The Singita Grumeti Community and Wildlife Conservation Fund (Grumeti Fund) was established to preserve the Singita Grumeti Reserves as a prime tourist destination.¹⁹⁶

Displaying a commitment to the long-term sustainable conservation of the area, the Grumeti Fund recognizes that the livelihoods of surrounding communities play an imperative

¹⁹² See generally, DUFFY, NATURE CRIME.

¹⁹³ Singita Game Reserves, *Grumeti Fund Guest Information*, 2 (May 2010) [hereinafter Grumeti Guest Information].

¹⁹⁴ Singita Game Reserves, *Sustainable Tourism at Singita Grumeti Reserves*, 1, available at http://www.singita.com/images/documents/Singita_Grumeti_Reserves.pdf (last visited Nov. 20, 2010).

¹⁹⁵ Grumeti Fund Guest Information, at 2. (Singita is the management company for Singita Grumeti Reserves in Tanzania, and its name is synonymous with top quality exclusive game lodge experience).

¹⁹⁶ *Id.*

role in this goal.¹⁹⁷ As a result, the Grumeti Fund adopted the Three Pillars Principle: (1) if they are to secure the wildlife resource, then (2) they can provide the ultimate tourism product and boost the industry, which in turn can be used to (3) stimulate the local economy.¹⁹⁸ This can be achieved through the creation of small business ventures that have the capacity to support the tourism industry, thus providing sustainable opportunities for economic empowerment within local communities who understand the value of a thriving wildlife resource.¹⁹⁹

The Grumeti Fund implements these principles in a variety of ways. For instance, many of the game scouts employed to patrol the Singita Reserves are in fact, ex-poachers.²⁰⁰ In the initiation stages of the project, poachers were interviewed upon arrest, and most stated that they would stop poaching if they had an alternative method of generating income.²⁰¹ As a result, a strict selection course was held and those that passed were trained at a very high level by experts in the field. Those who performed well in the course were then offered employment by Singita Reserves as an alternative to poaching.²⁰² In order to encourage the scouts to remain loyal and not succumb once again to the allure of poaching, continual motivation and feedback is provided so that they can be proud of the conservation ethic of which they have become a part.²⁰³

According to a research ecologist with the Grumeti Fund, the idea is that by providing the local communities with business ventures such as honey production, vegetable and fruit farms, and sunflower oil production as an alternative to poaching, the local communities can supply the

¹⁹⁷ See generally, Singita Game Reserves, *Sustainable Tourism at Singita Grumeti Reserves* at 1, available at http://www.singita.com/images/documents/Singita_Grumeti_Reserves.pdf (last visited Nov. 20, 2010).

¹⁹⁸ Grumeti Fund Guest Information, at 3.

¹⁹⁹ Grumeti Guest Information, *supra* note 193, at 6.

²⁰⁰ *Id.*

²⁰¹ *Id.* at 6; See also, E-mail from Research Ecologist, Singita Grumeti Fund, Tanzania to Tricia Patel, Student at Florida State University College of Law (Oct. 12, 2010, 01:00 EST).

²⁰² E-mail from Research Ecologist, Singita Grumeti Fund, Tanzania to Tricia Patel, Student at Florida State University College of Law (Oct. 12, 2010, 01:00 EST).

²⁰³ *Id.*

Singita lodges with goods and services.²⁰⁴ There were numerous challenges in terms of training and educating the local communities for previously, they had little opportunity for business development and therefore, did not have the skills development necessarily required to establish such businesses.²⁰⁵

There are also many lessons that have been learned along the way to establishing this relationship with the local communities. For instance, one of the key lessons learned was that “in order for communities to take ownership of the projects, there needs to be a participatory approach and they need to invest something from their side first, [in order] to demonstrate [their] commitment. Then we will assist in taking it forward.”²⁰⁶ Since its inception, there have been secondary spin offs to the operation that were not facilitated directly by the Grumeti Fund, but rather by their mere presence in the area. For instance, eight years ago there were only two shops in Natta, a village close to the reserve, and now there are over forty shops, all of which provide people with income and opportunity.²⁰⁷

In terms of dealing with current poaching activities, the Grumeti Fund is able to collect data on illegal incidents that are detected during patrols.²⁰⁸ The game scouts have no arrest authority, are unarmed, and merely patrol the reserve as a presence.²⁰⁹ These illegal incidents recorded range from the discovery of snares to arrests for poaching (made by the Wildlife Division who often perform joint patrols and have the authority to arrest).²¹⁰ Where people are involved and arrests made, the issue goes to court or to the village government. Though punishment can range from fines to imprisonment, “unfortunately the judicial system is not

²⁰⁴ Interview with Research Ecologist, Singita Grumeti Fund, Tanzania (Nov. 5, 2010).

²⁰⁵ Interview with Research Ecologist, Singita Grumeti Fund, Tanzania (Nov. 5, 2010).

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ Grumeti Fund Guest Information, *supra* note 193, at 7.

²⁰⁹ Interview with Research Ecologist, Singita Grumeti Fund, Tanzania (Nov. 5, 2010).

²¹⁰ *Id.*

always ‘efficient’ in effecting the necessary and due justice.”²¹¹ The Grumeti Fund is an example of how empowering a local community so that they may reap the benefits of eco-tourism can lead to thriving wildlife conservation. The Grumeti Fund provided the local community with an economic incentive that was not previously recognized, and as a result, they share a successful relationship with one another.

c) Anti-poaching strategies against commercial poachers

Though the community-based wildlife management policies can be successful in combating subsistence poaching, it is not a viable alternative for commercial poachers who are motivated primarily by economic gain. Efforts to combat commercial poaching have led to the establishment of investigative agencies, such as the National Biodiversity Investigators Forum in South Africa.²¹² Working in conjunction with relevant wildlife authorities, these investigative agencies work to gather intelligence and facilitate cooperation amongst various law enforcement bodies.²¹³ Additionally, though a costly endeavor, the translocation of rhinos to safer areas has been attempted on several occasions with limited success.²¹⁴

Despite these reasonable attempts, the war against poaching has often led to more extreme measures being taken. For instance, during the 1990s, dehorning exercises were carried out in Namibia, Swaziland and Zimbabwe, and in 1992, “dehorning became a national conservation policy objective in Zimbabwe.”²¹⁵ Rhinos are able to grow a new horn relatively

²¹¹ Interview with Research Ecologist, Singita Grumeti Fund, Tanzania (Nov. 5, 2010).

²¹² Fifteenth Conference of the Parties, *African and Asian Rhinoceroses – Status, Conservation and Trade* at 10 (Nov. 20, 2009).

²¹³ *Id.*

²¹⁴ *Id.*

²¹⁵ E.J. Milner-Gulland etc., *Is Dehorning African Rhinos Worthwhile?*, Ecosystems Analysis and Management Group, 1 (2004), available at http://www.rhinosourcecenter.com/ref_files/1175862394.pdf (last visited Nov. 20, 2010).

quickly, and its horn can be removed without hurting or killing the animal.²¹⁶ Though Zimbabwe reported the dehorning effort as successful, it was not an adequate deterrent for poachers who were “prepared to remove any vestige of horns, including the small growth nubs on rhino calves.”²¹⁷ Therefore, dehorning is no longer the primary anti-poaching strategy used to combat commercial poaching.

More controversial anti-poaching strategies include a more militarized approach, whereby the use of military tactics are used by park rangers, leading to more coercive and violent encounters with commercial poachers.²¹⁸ For instance, at some point in time both, the governments of Zimbabwe and Kenya have adopted controversial “shoot-to-kill” policies in an effort to combat commercial poaching.²¹⁹ However, when Zimbabwe authorized its shoot-to-kill policy in the 1980s, it was met with fierce international opposition.²²⁰

d) Desperate times call for desperate measures: the international controversy surrounding Operation Stronghold

Commercial poaching became rampant in Zimbabwe during the 1980s, and as a result, the government implemented more coercive anti-poaching strategies.²²¹ In 1984, Operation Stronghold was formulated with the intent to strengthen the capacity of the Parks Department’s anti-poaching methods.²²² Operation Stronghold “relied on four dimensions: local reaction,

²¹⁶ DUFFY, NATURE CRIME, *supra* note 18, at 114.

²¹⁷ Endangered Wildlife Trust, *Rhino Dehorning at 2*, available at <https://www.ewt.org.za/portals/0/EWT%20Fact%20Sheets/Q&A%20Rhino%20dehorning.pdf> (last visited Nov. 20, 2010).

²¹⁸ DUFFY, NATURE CRIME, *supra* note 18, at 96-97.

²¹⁹ Songorwa, *supra* note 182, at 604.

²²⁰ *See generally*, DUFFY, KILLING FOR CONSERVATION, *supra* note 123.

²²¹ DUFFY, KILLING FOR CONSERVATION at 48.

²²² *Id.*

national reaction, international reaction and intelligence gathering.”²²³ However, at the core of the operation was a shoot-to-kill policy that was justified as a last resort decision of the park ranger on the ground.²²⁴

Between 1984 and 1993, park rangers killed approximately 170 poachers.²²⁵ Though accused of being trigger-happy, the Zimbabwean game wardens were further supported by the passing of the Protection of Wildlife (Indemnity) Act in 1989.²²⁶ There was concern that Parks rangers would be unable to carry out their duties under the shoot-to-kill policy if they feared they could be charged with murder.²²⁷ Therefore, the Indemnity Act meant that Parks rangers could be absolved of criminal liability for any course of action that was carried out in good faith, as well as any action in connection with the suppression of poaching.²²⁸ The Indemnity Act had the subsequent effect of boosting morale amongst anti-poaching units, who put their lives at risk despite often being underpaid and underequipped.²²⁹ Moreover, the operation was considered a success in the war against commercial poaching when the world saw more poachers killed than rhinos in 1990.²³⁰

Zimbabwe’s shoot-to-kill policy was met with fierce international opposition, and many international human rights organizations condemned the operation and the Indemnity Act as inhumane.²³¹ The Indemnity Act was perceived as a violation of basic human rights, for the victims of the shoot-to-kill policy were merely suspected of poaching; they were denied basic

²²³ DUFFY, KILLING FOR CONSERVATION, *supra* note 123, at 48.

²²⁴ *Id.* at 49.

²²⁵ *Id.*

²²⁶ *Id.* at 50.

²²⁷ *Id.*

²²⁸ *Id.* at 50.

²²⁹ *Id.* at 50-51.

²³⁰ *Id.* at 49.

²³¹ *Id.* at 50.

due process and their involvement was never proved under the law.²³² Despite these controversies, Zimbabwe's anti-poaching policies gained monetary support from NGOs that were committed to preserving biodiversity, such as the World Wildlife Fund (WWF).²³³ In 1987, the WWF donated a helicopter to the Parks Department, which was later reported to have been used to shoot a poacher under the shoot-to-kill policy.²³⁴ This led to an outcry amongst conservation organizations and an international public relations disaster that purported the WWF condoning acts of violence.²³⁵

The WWF had a strong policy not to provide funding for weaponry, and as a result, withdrew their financial support for the helicopter, stating that the organization did not agree with Zimbabwe's conservation policy, and specifically, that of culling.²³⁶ Rhino poaching was still widespread throughout Zimbabwe's borders, and eventually, it was realized that Operation Stronghold did not have the desired effect.²³⁷ Commercial poachers continued to exploit resources, and the underfunded Parks Department was no match for the well-funded and well-armed poachers.²³⁸ Operation Stronghold was an example of how an expansion of governmental coercion can lead to detrimental effects, including human rights abuses; it was a failure in conservation.

e) Current anti-poaching strategies: What can we do now?

²³² DUFFY, KILLING FOR CONSERVATION, *supra* note 123, at 50.

²³³ *Id.* at 53.

²³⁴ *Id.*

²³⁵ *Id.*

²³⁶ *Id.* (The WWF also stated that their decision to withdraw the money annually needed to run the helicopter was primarily due to a lack of funds).

²³⁷ *Id.* at 53.

²³⁸ *Id.* at 56.

Despite the perceived failures of dehorning rhinos and shoot-to-kill policies, both are once again being suggested as effective anti-poaching strategies. Farm owners in South Africa have taken to dehorning their rhinos in order to provide them with a better chance of survival.²³⁹ Though dehorning may not guarantee survival, owners believe that making it public that their rhinos have been dehorned will deter poachers from killing the animals.²⁴⁰

Slightly more experimental anti-poaching strategies are also taking place in South Africa, where rhino horns are being poisoned with cyanide in the hope that when a consumer ingests it for medicinal purposes, they will die.²⁴¹ The proponent of this method, owner of the Rhino and Lion Park, Ed Hern, believes that this will deter consumers and reduce the demand for rhino horns.²⁴² The poison is still being experimented with and small amounts are being injected into a rhino so that any adverse effects may be monitored.²⁴³

In some countries, military intervention is also being sought. For instance, this year saw more than two hundred rhinos killed in South Africa alone, and as a result, the defense ministry has recently announced that the army will aid game parks in their fight against rhino poachers by providing them with additional equipment.²⁴⁴ Lastly, the controversial shoot-to-kill policies are once again being considered by conservation organizations in Africa, where game rangers are

²³⁹ International Rhino Foundation, *Owners Resort to Dehorning Rhino to Protect Them* (Aug. 10, 2010), available at <http://www.rhinos-irf.org/en/art/1120/> (last visited Nov. 21, 2010).

²⁴⁰ *Id.*

²⁴¹ Sapa, *Poison Horns to Save Rhinos?*, TIMES LIVE (July 23, 2010), available at <http://www.timeslive.co.za/scitech/article566131.ece/Poison-horns-to-save-rhinos> (last visited Nov. 21, 2010).

²⁴² *Id.*

²⁴³ *Id.*

²⁴⁴ *South Africa Military to Join Rhino Poaching Fight*, BBC NEWS (Nov. 17, 2010), available at <http://www.bbc.co.uk/news/world-africa-11775223> (last visited Nov. 22, 2010).

being trained by mercenaries and private security firms.²⁴⁵ Many of these proposed anti-poaching strategies can lead to devastating legal repercussions.

V. Conclusion

Just as it did a century ago, the most serious threat to wildlife comes from predatory humans.²⁴⁶ Though poaching of the African elephant and rhino is still prevalent today, it is necessary to look to previous anti-poaching strategies so that the same mistakes are not made again. It is also important to understand the lack of consensus amongst the African nations as to the best method of preserving elephant and rhino populations, so that future conservation proposals do not continue to disregard indigenous communities.

Though regarded by most as the most comprehensive international conservation treaty, CITES is often criticized as an ineffective mechanism for international trade regulation of endangered species,²⁴⁷ and such opinions are not unfounded. The Convention places much responsibility on member nations to implement domestic legislation that is in compliance with CITES provisions,²⁴⁸ however, there is little that is done when a state is in violation of the Convention.²⁴⁹ A fundamental flaw with the Convention is that it assumes member States have the capacity to implement and enforce the necessary legislations to preserve wildlife, when often, the burden falls upon the local communities, rather than the central governments.²⁵⁰

²⁴⁵ Martin Plaut, *African Conservationists 'Shoot to Kill Poachers,'* BBC NEWS (Aug. 16, 2010), available at <http://www.bbc.co.uk/news/world-africa-10992502> (last visited Nov. 21, 2010).

²⁴⁶ Douglas H. Chadwick, *India's Grassland Kingdom,* NATIONAL GEOGRAPHIC, Aug. 2010, at 114.

²⁴⁷ CRS Report, *supra* note 32, at 29.

²⁴⁸ *Id.*

²⁴⁹ Baglivo, *supra* note 35, at 279.

²⁵⁰ HUNTER, *supra* note 21, at 1115.

In order for local communities to value wildlife conservation, oftentimes it is necessary to establish economic incentives as an alternative to poaching.²⁵¹ Studies have shown that most subsistence poachers hunt for food, and though there has been an increase in bushmeat trade in recent years, subsistence poaching still does not pose as great a threat to wildlife as commercial poaching. Moreover, many local populations poach for lack of an alternative; poaching can generate a great profit and though the economic value is transient, it can still provide some villagers with the bare necessities, such as soap.²⁵² However, if the opportunity presented itself, many subsistence poachers would not hesitate to choose an alternative lifestyle to poaching.²⁵³

Though community-based wildlife management programs have been established in several African countries, they are often unsuccessful for they fail to address the needs of the villagers and assume the same motivations as commercial poachers. As a result, local populations are often depicted as the enemies of wildlife, when in fact, they fully recognize the value of sustaining endangered species. Successful community-based conservation programs, such as those established by the Grumeti Fund in Tanzania, are sound models that should be implemented in other local settlements.

The Grumeti Fund has successfully established a working relationship with ex-poachers, providing them with rigorous training so that they may play an active role in wildlife conservation. The Grumeti Fund also understands the needs of the local community and strives to establish economic incentives so that the villagers too, can profit from tourism. Additionally, the Grumeti Fund provides education for children, which is imperative to implementing a long-term solution for wildlife conservation.²⁵⁴ All of these factors combined prove that successful

²⁵¹ Grumeti Guest Information, *supra* note 193, at 2.

²⁵² Brown, *supra* note 141, at 92-101.

²⁵³ Grumeti Guest Information, *supra* note 193, at 6.

²⁵⁴ *See generally*, Grumeti Guest Information.

relationships can be established with local populations, and more importantly, that community-based conservation programs can have merit.

Another criticism of CITES is that it takes for granted that the very governments that are responsible for exacting wildlife trade laws are not rife with corruption and are therefore, not complicit in the illegal trade of wildlife. However, this is not always the case, as exemplified by the devastating rhino poaching in Zimbabwe during the 1980s, where the commercial poaching simply could not have taken place without government complicity.²⁵⁵

Operation Stronghold in Zimbabwe is a quintessential example of how government coercion and extreme anti-poaching measures can have detrimental effects. The military tactics used were conducted with a complete disregard for human life, and as a result, the policy was engulfed in controversy. Not only did other African governments condemn the policy, but international human rights organizations were also relentless in their opposition.²⁵⁶ Shoot-to-kill policies are a violation of fundamental human rights; they lack the necessary due process rights afforded by all nations and disregard the fact that some suspects may not in fact be involved in commercial poaching. The fact that shoot-to-kill policies are currently being considered by some African countries means that nothing has been learned from the failure of Operation Stronghold.

Though current proposals have been made by the private sector, there is only a slight difference between private security firms implementing a shoot-to-kill policy and a central government authorizing the policy. Both have equally detrimental effects and both equally disregard human life, however, if a private security firm is responsible for condoning the policy, the government can still speak out against it. One of the main reasons that Operation Stronghold survived as long as it did was because the Zimbabwean government passed the Indemnity Act,

²⁵⁵ See generally, DUFFY: KILLING FOR CONSERVATION, *supra* note 123.

²⁵⁶ *Id.*

thereby absolving Parks rangers from criminal liability.²⁵⁷ If the private sector takes matters into its own hands by implementing a shoot-to-kill policy, it does not have to be supported by central governments. If legislations are not passed that support the policy, then those rangers who partake in such violence will still face criminal liability without the protection of the government. Additionally, if an African government were to condone such a policy, it would likely face harsh international criticism, which could have other negative effects, such as more stringent trade restrictions.

The anti-poaching measure of lacing rhino horns with poison is also an incredibly extreme reaction to commercial poaching.²⁵⁸ Though it is understandable that those who care for rhinos on their property are threatened by poachers, these excessive measures are not the best method of providing a long-term solution to eradicating poaching. The fact that the rhino horns are being poisoned with the intent of harming a consumer could have severe legal repercussions and could potentially result in charges of manslaughter. That is not to say that the fear and frustration of conservationists is not well founded, however, poison is never the best method. However, the fact that the dehorning of rhinos is also taking place once again, emphasizes the fact that conservationists are running out of options. Though the process of dehorning comes at virtually no harm to the rhino, it has not proved efficient in the past, and there is little reason to believe that it will be an effective anti-poaching mechanism today.

²⁵⁷ DUFFY: KILLING FOR CONSERVATION, *supra* note 123, at 50.

²⁵⁸ Sapa, *Poison Horns to Save Rhinos?*, TIMES LIVE (July 23, 2010), available at <http://www.timeslive.co.za/scitech/article566131.ece/Poison-horns-to-save-rhinos> (last visited Nov. 21, 2010).

VI. Recommendations

Despite previous setbacks, the international community should not underestimate the role they can play in establishing strong wildlife conservation mechanisms. For instance, the Coalition Against Wildlife Trafficking (CAWT) was initiated by the United States in 2005.²⁵⁹ Through voluntary partnerships amongst governments and non-governmental entities, CAWT serves to “raise the political profile of international wildlife crime.”²⁶⁰ The three main goals of CAWT are to: “(1) improve wildlife law enforcement by expanding training, information sharing, and strengthening regional cooperative networks; (2) reduce consumer demand for illegally traded wildlife by raising awareness of its consequences; and (3) broaden support for combating wildlife trafficking at the highest political levels.”²⁶¹

These initiatives are facilitated through international training courses about wildlife law enforcement, as well as campaigns to raise awareness of the proclivity for illicit wildlife.²⁶² CAWT is just one example of how these organizations can further conservation interests through education, and if consumers understand the value of the animal that is being traded, perhaps the market will dissipate as it did with ivory.

Additionally, military tactics can be utilized in a positive manner; for instance, mercenaries should be responsible for training park rangers to be better prepared during encounters with poachers. Many of these rangers put their lives at risk in order to protect wildlife and it is important for them to feel confident in their abilities. Though these skills can provide park rangers with the ability to combat commercial poachers, the disparity in equipment between

²⁵⁹ CAWT, *Partners in the Global Fight Against Illegal Wildlife Trade*, Coalition Against Wildlife Trafficking, available at <http://www.cawtglobal.org/about/> (last visited Nov. 21, 2010).

²⁶⁰ CRS Report, *supra* note 32, at 30.

²⁶¹ *Id.*

²⁶² CAWT, *Partners in the Global Fight Against Illegal Wildlife Trade*, Coalition Against Wildlife Trafficking, available at <http://www.cawtglobal.org/about/> (last visited Nov. 21, 2010).

park rangers and commercial poachers is a greater cause for concern. Many of these commercial poachers are funded by larger organized crime units, and therefore, have an advantage over most park rangers. African governments, coupled with international aid should make a stronger commitment to provide Parks Departments with appropriate equipment, such as weapons and helicopters. At the very least, the people protecting the wildlife should be on the same platform as the poachers.

It is also essential to look at previous models of success so that community-based conservation programs can be strengthened. The Grumeti Fund is a strong example of how subsistence poaching can be eradicated from a community by providing economic incentives and alternatives to poaching. Such models should be analyzed and made compatible with other local settlements, so that in time, subsistence poaching will no longer pose a threat to wildlife. It is also important to understand the differences in motivating factors for subsistence poaching and commercial poaching, so that each can be addressed appropriately. It is time the international community understands that local populations are not enemies of wildlife, but in fact, have the capacity to be the greatest protectors.