

Limited Trade and the CITES Ivory Trade Ban: Sustainable Use As a Viable Means of  
Conservation

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## Abstract

The over-exploitation of African elephants for their ivory has led to a dangerous decline in their overall population. As a result, they were granted protection under the CITES international trade agreement and given an Appendix I listing, which completely bans their international trade. I investigate the following question: under what circumstances is the limited trade allowed under the CITES ivory trade ban an effective strategy to stall the illicit trafficking of elephant ivory? Using Kenya and Zimbabwe as case studies, the feasibility of the preservationist and utilitarian viewpoints on elephant conservation are explored. This paper argues that the CITES ban on trade in elephant ivory is not the most effective way to protect elephant populations. Instead, limited and regulated trade should be instituted to ensure that African range states receive tangible benefits from elephant conservation. This could be achieved through keeping the more endangered forest elephants classified under Appendix I while moving the more stable savannah elephants to Appendix II. Community-based rights to elephants, specifically, should be put in place to ensure that locals living in close proximity to elephants have significant incentives to actively participate in elephant conservation, rather than participating in poaching or turning elephant habitat into agricultural land. While community-based wildlife rights under an Appendix II listing for savannah elephants are in no way perfect, they are a more effective and realistic means of conserving elephants than the alternative of a blanket ban.

## **Introduction**

In the decades leading up to the 1980s, increasing international trade in African elephant ivory led to the decimation of the African elephant population. Elephants have very important roles in their ecosystems, and their disappearance threatens the biodiversity of the entire region. The rapid decline in elephant numbers led many in the international community to become concerned about the survival of African elephants as a species. As a result, African elephants were entered into the listing system of the preeminent international trade treaty concerning at-risk species: the Convention on International Trade in Endangered Species of Flora and Fauna, or CITES. Since 1989, international trade in African elephant ivory has been banned. The ban has been lifted twice, once in 1999 and once in 2008, for limited one-off sales.

I will investigate the extent to which the limited trade allowed under CITES, such as the 1999 and 2008 one-off sales, is an effective means of controlling the illicit trade in African elephant ivory. This brings up the question of under what circumstances do the opportunities for limited trade allowed under the CITES ivory trade ban serve as an effective strategy to stall the illicit trafficking of elephant ivory? I will argue that the CITES protection of African elephants would be more successful if it allowed for more extensive limited trade, rather than depending on a blanket ban. The most efficient way of achieving this goal would be to create separate listings for the genetically distinct savannah and forest elephants, allowing the stable populations of the former to be down-listed to Appendix II while keeping the endangered populations of the latter under Appendix I. I also argue that limited trade is most successful when local communities hold the rights to African elephants, which results in incentives for people to protect elephants as valuable resources rather than see them as pests or as threats.

While several African range states and buyer nations will be discussed, Kenya and Zimbabwe specifically will serve as my case studies because they represent the extremes of the intrinsic divide between the preservationist and utilitarian views of the ban. Their differing levels of success in protecting their elephant populations, following their chosen strategies, highlight the importance of the feasibility of conservation strategies, not just the ideological beliefs behind them. Zimbabwe, additionally, is the founder of one of the most successful community-based sustainable use programs to date, the Community Areas Management Program for Indigenous Resources, or CAMPFIRE.

## **A History of African Elephant Ivory, CITES and the Ivory Trade Ban**

### *African Elephant Ivory*

African and Asian elephant ivory has long been used in cultural and religious items ranging from prehistoric times up until the present day (UNEP et al., 2013). This paper focuses on African elephants, which are found throughout 37 countries in Africa, known as range states (Lemieux and Clarke, 2009, p. 451). Around 39 percent of elephants are found in Southern Africa, 29 percent in Central Africa, 26 percent in Eastern Africa, and 5 percent in Western Africa (UNEP et al., 2013, p. 15). The elephants in Southern Africa are savannah dwelling elephants whereas the elephants in Central and Western Africa are forest dwelling (Stiles, 2004). Genetic evidence shows that forest elephants and savannah elephants could be classified as

different species as they are morphologically, ecologically, and socially unique from one another (Blake and Hedges, 2004). Elephants are what is known as a keystone species, one that is essential to the African ecosystem because of the role they play in spreading seeds, recycling nutrients, reducing bushes and small trees, and helping maintain grasslands (Naylor, 2011).

Because African elephants experience very slow population growth, their overexploitation has grievous consequences for the continuation of the species (Bulte et al., 2004). Both male and female African elephants have tusks, males having larger ones than females, which continue to grow throughout their lives (Favre, 2011). About a quarter of the tusk is hidden in the upper jaw socket, and cannot be easily removed without killing the elephant. Bigger tusks garner bigger profits, which results in male elephants being targeted more often than females and produces skewed sex ratios (Lemieux and Clarke, 2009). As the numbers of larger male elephants dwindle, more and more smaller elephants must be poached in order to meet the same weight demanded. Poaching, human population expansion, and desertification have all exacerbated the speed of African elephant population decline (Lemieux and Clarke, 2009).

There are several parallels between the situation faced by African elephants and the one faced by Asian elephants. The Asian elephant is considered endangered and the primary threat to their survival is habitat loss and deforestation resulting from expanding human populations as well as the human-elephant conflict that follows (UNEP et al., 2013). Only male Asian elephants have tusks, however, and these tusks are significantly smaller than African elephant tusks. The great demand of elephant ivory in Asia far outstrips the amount that could be provided by Asian elephants, thus the majority of ivory entering Asia is African in origin (Christy 2012).

#### *CITES*

The call for the sustainable use of natural resources rose out of increasing concern about the safety of the biodiversity of key environmental regions, especially in developing nations (Barbier, 1995). The advent of globalization and increased international trade in wildlife and wildlife products has resulted in a global crisis in biodiversity (Reeve, 2006). The Convention on the International Trade in Endangered Species of Flora and Fauna, or CITES, was formed in 1973 to protect endangered plants and animals from being overexploited by trade (Reeve, 2006). CITES has 177 signatory nations and despite the fact that it is a voluntary agreement there are no prominent UN member nations who are not also members of CITES (UNEP et al., 2013). Over 30,000 species are listed under CITES; not all of them are endangered and not all endangered species are listed (Ginsberg, 2002, p. 1184).

CITES has no enforcement power of its own; rather it depends on the cooperation of its signatories for enforcement (Kaempfer and Lowenberg, 1999). CITES uses certificates and permits to regulate trade in certain species through a system of three appendices. Appendix I prohibits international trade in a certain species, with only a few exceptions in which both the importing and exporting country must have permits proving that the trade will not be detrimental to the survival of the species (Reeve, 2006; Heimert, 1995). Appendix II is for species that are not necessarily threatened with extinction but might be if trade is not limited; commercial trade of these species, such as the American black bear, is carefully monitored (Lemieux and Clarke,

2009). Appendix III is a cautionary listing, meaning at least one member state has entered a concern about the status of a certain species.

Because CITES has no specific means through which to measure compliance, it depends on reports from member states at the meetings of the Conference of the Parties (Reeve, 2006). The CITES Secretariat, its primary decision-making body, can receive assistance from qualified NGOs, including TRAFFIC, a wildlife monitoring organization; the International Union on the Conservation of Nature, IUCN; and the United Nations Environmental Program, UNEP. When member states do not comply with CITES mandates, other member nations impose trade sanctions on the non-complying state, which has proven to be a fairly effective means of compliance (Reeve, 2006). CITES can also sanction a non-complying nation's trade in another CITES-regulated species (Lemieux and Clarke, 2009). Shaming by the international community is the primary method of ensuring compliance (Danaher, 1999).

CITES sanctions do not interfere with the working of the World Trade Organization because Article XX under the General Agreement on Tariffs and Trade stipulates that exceptions to GATT rules for free trade can be made for cases in which the well-being of a human, animal, or plant needs to be protected as well as when it relates to the conservation of an exhaustible natural resource (Wold, 2012). There has never been a case brought to the WTO against CITES sanctions and the two organizations are in communication with each other, as evidenced by CITES invitation to speak at the 2013 meeting of the WTO's Committee on Trade and Environment (CITES, 2013a).

The Conference of the Parties meets every two years to make decisions on the listings of different species based on their level of endangerment (Gehring and Ruffing, 2008). Accuracy of listings is very important for both ensuring compliance and protecting species. An inaccurate designation of a species' level of endangerment would needlessly restrict trade whereas failure to list an endangered species could result in its extinction. To prepare the listings, the Conference of the Parties consults scientists, the CITES Secretariat, NGOs, and state agencies. However, the final decision is made at the Conference of the Parties meetings by the member nations, meaning political power plays a significant role in the end result. Because there are no specific criteria for the listings of species, the issue of what is listed, which is supposed to be solely based on levels of endangerment, becomes politicized. Politically powerful nations pressure other member nations about what they believe should and should not be listed. In 1992 the eighth Conference of the Parties in Kyoto was supposed to discuss the up listing of the blue fin tuna to Appendix I but a backroom deal between the United States, Canada, Japan, and the powerful tuna industry led to the proposal being withdrawn by its author Sweden before it was even presented (Favre, 1993). Decisions must be made with a two-thirds majority and are adopted within 90 days of their ratification (Gehring and Ruffing, 2008). Article VII of the Convention exempts pre-convention specimens from any of the restrictions under the Appendices classification system (Sands and Bedecarre, 1990). This mandate was designed to allow stockholders to trade their existing stocks before a ban goes into effect, as well as continue to trade antique specimens. In the case of ivory this allowed for a great deal of abuse, which will be discussed in greater detail later.

### *The Ivory Trade Ban*

At every Conference of the Parties since 1985, elephants and the ivory trade ban have been extremely contentious issues (Stiles, 2004). There are two primary threats to the survival of the African elephant: illegal killing for ivory to be traded internationally, and elimination as a result of direct killing due to human-elephant conflict or habitat loss. The CITES ban only has power over the first of these threats (Favre, 2001). Despite the fact that most ivory producing nations in Africa are CITES signatories, many of their elephant populations continued to plummet significantly in the late 1970s and early 1980s (Pilgram and Western, 1986). Up to 1,000 tons of ivory left Africa each year between 1979 and 1989, 90 percent of it illegal (Hitch, 1998, p. 3) Prior to 1989, elephant mortality was around 20 times the level sustainable for the population (Hitch, 1998, p. 3).

Some estimates claim that in the 1980s the population of African elephants fell from 1.2 million to 600,000, primarily due to poaching (Barbier, 1995, p. 3). The enormous reduction in elephant populations resulted in significant public pressure on consumer countries, specifically the United States, European Union, and Japan, to put harsher restrictions in place (Sands and Bedecarre, 1990). In 1977, elephants were placed on Appendix II, limiting their trade through a permit system (Kaempfer and Lowenberg, 1999). Countries like Kenya struggled with enforcement of this permit system because of their underfunded and corrupt wildlife service, which had few resources left over to put towards stopping poachers (Naylor, 2011). A quota system was established in 1984 to allow countries to sustainably use their elephant populations, but it was abused (Kaempfer and Lowenberg, 1999). In 1986 for example, Somalia set their quota at 17,000 tusks when their elephant population probably totaled no more than 6,000; it was suspected that Somalia was planning to export tusks poached in Kenya (Heimert, 1995, p. 1473). When the quota system failed, many signatories, mostly Western states, called for a complete ban (Gehring and Ruffing, 2008).

In the summer of 1989, both the United States and the United Kingdom implemented bans on ivory imports, while both Japan and Hong Kong implemented increased controls (Kaempfer and Lowenberg, 1999). In October of 1989, the Conference of the Parties met in Lausanne, Switzerland and voted to increase the African Elephant's listing to Appendix I, banning all trade in their parts and ivory (Kaempfer and Lowenberg, 1999). Zimbabwe, Namibia, South Africa, Botswana, and Malawi did not support the ban, insisting that their elephant populations were largely stable (Bulte et al., 2007).

### **Conflicting Perspectives on the Ivory Trade Ban**

There are two main conflicting perspectives on the debate over the CITES ban on trade in elephant ivory: preservationist and utilitarian. Preservationists do not approve of any kind of trade in elephant ivory, and support the full ban. Those who hold the utilitarian viewpoint support limited, sustainable trade in ivory and claim the ban is actually doing more harm than good. Both sides of the preservationist versus utilitarian debate have data that supposedly supports their viewpoints (Milliken, 2010). This philosophical divide over the use of trade as a conservation tool is, in many ways, irreconcilable (Ginsberg, 2002).

### *Preservationist Theory*

Supporters of the ban, mostly from Eastern and Central African nations as well as Asian nations, claim that even a partial lifting of the ban, for countries with higher population numbers, would spur harmful poaching activity that would spill over into other countries without healthy elephant populations, and would also facilitate the laundering of illegal ivory obtained in those states (Walsh and White, 1999). Supporters of the ban are also skeptical of the elephant population figures put forward by opponents of the ban. They question whether the elephant populations examined could truly have been effectively monitored and counted in the amount of time claimed, especially considering that many of the elephants in those states reside in the forest, which presents additional surveying difficulties in comparison with the savannah. Surveying takes significant resources, which most African governments do not possess (Walsh and White, 1999).

Kenya has been one of the most continuously vocal proponents of the ban. In 1989 its then-president Daniel arap Moi held a mass burning of confiscated ivory in conjunction with the implementation of the ban on international trade in ivory (Sands and Bedecarre, 1990). This gesture exemplifies Kenya's strong opposition to the idea of utilitarianism, burning sellable ivory instead of using the funds from a possible sale for conservation (Heimert, 1995). Kenya focuses on the use of tourism, rather than the sale of ivory, to gain value out of elephant existence (Heimert, 1995). Former Kenyan wildlife director Richard Leakey claimed that if ivory was not available because of a ban, then it would lose its economic value (Kaempfer and Lowenberg, 1999). Preservationists take great ethical and moral issue with the idea of legally being able to kill animals as sentient and intelligent as elephants (Bulte et al., 2007).

Animal rights activists, who see the killing of any animal as problematic, were strong lobbyists for the ban (Kaempfer and Lowenberg, 1999). Preservationists put the existence value of elephants above the potential benefits of consumptive use (Sugg and Kreuter, 1994). Preservationists say that no one knows for certain what will happen if trade in ivory is resumed, and the stakes are too high if utilitarian supporters are wrong (Bulte et al., 2004). One of their concerns with resuming legal trade is that it will reverse the stigma around ivory consumption that was so hard to develop (Stiles, 2004). The lack of stigma around ivory trade was one factor that led to the enormous decrease in elephant populations in the first place (Stiles, 2004). Allowing limited trade would make ivory consumption more acceptable and would increase demand for ivory, further increasing the incentives for poachers and traffickers to enter the illegal ivory market.

### *Utilitarian Theory*

From a utilitarian viewpoint, Richard Leakey's stance fundamentally fails to understand how economic markets function; ivory has economic value because people want to consume it, not just because it is available (Kaempfer and Lowenberg, 1999). Attempting to eradicate ivory from the world market entirely cannot succeed in eliminating elephant poaching because if even one person demands ivory, a market will spring up to provide it, legally or illegally (Kaempfer and Lowenberg, 1999). Is it not better, utilitarian thinkers ask, to have a controlled, legal market in which ivory trading can be monitored and financial gains can be used as a tangible benefit for

community participation in conservation? Utilitarianism seeks to simultaneously preserve a significant portion of the elephant population, and maximize sustainable ivory production (Pilgram and Western, 1986).

For utilitarian supporters, it is not a question of *if* resources will be used but *how* they will be used (Sugg and Kreuter, 1994). Elephants fall victim to the tragedy of the commons. While African states technically have ownership over the elephants in their state, their law enforcement is usually so weak that elephants are essentially open access resources. Economic value and ownership makes elephants an asset to be protected, incentivizing their conservation. A ban reduces the value of the elephants to people who compete with them for resources but do not reap any of the benefits of the existence of elephants (Sugg and Kreuter, 1994). Those against a complete ban tend to come from nations in Southern Africa, where the less threatened savannah elephant populations live, and at times actually exceed the carrying capacity of their range (Walsh and White, 1999). A total ban on trade in ivory eliminates a source of funding for the infrastructure needed for conservation in states that do not have much funding to spare. Ban opponents claim that foreign currency from ivory sales was a key contributor to conservation funds before 1989 (Sands and Bedecarre, 1990).

For the governments and residents of African range states, a failure to gain significant returns on the sale of elephant ivory represents a lack of incentive to continue to invest in protection (Barbier, 1995). Controlled trade, therefore, is beneficial because even a small amount of gain from limited legal trade is better than no benefit from a complete ban, and incentivizes protection. Only producer countries who follow the rules and who had stable and sufficiently healthy elephant populations would be able to participate; limited trade is not designed to reward countries that skirt regulations or harm elephant populations in grave danger (Barbier, 1995).

The primary issue in elephant conservation centers on the problem of where to get the resources that facilitate the conservation of elephants (Favre, 2001). Ban opponents favor a free market approach in which the elephants can be consumptively utilized, thereby giving rural Africans tangible benefits from the elephants' existence and leading to more investment in their protection (Kaempfer and Lowenberg, 1999). Traditionally few benefits from wildlife parks actually accrue to rural Africans who live nearby (Kaempfer and Lowenberg, 1999). As a result, they have little stake in the conservation of elephants or any other animals in such parks, which all take up land that could otherwise have been used for agriculture. Corruption often diverts any of the money that would go to the locals, leaving them with very small returns from touristic earnings, which is the main source of revenue from elephants when their trade is banned (Kaempfer and Lowenberg, 1999).

Sustainable utilization allows for both environmental and development goals to occur in conjunction, solidifying development to a greater degree than if the environment were being degraded (Duffy, 1997). Consumptive utilization can be seen as both a rural development strategy as well as a commercial strategy for development in African range states. It seeks to treat elephants in a humane manner while also respecting the right of people to control their own natural resources (Duffy, 1997). Western-style preservationist ideas do not, in the eyes of most African residents of range states, align with the goals of African development (Hitch, 1998).

There is also the question of whether the CITES ban places a higher value on elephants than on humans (Stiles, 2004).

The utilitarian critique of preservationists sees them as urban dwellers holding romanticized visions of the natural world, in which Africa is akin to some sort of Garden of Eden where people and livestock have no right to impede on the environment around them (Kreuter and Simmons, 1994). Even though range states are not compensated for the existence value of elephants, they bear all the costs associated with protecting elephants (Bulte and van Kooten, 1999). In order for conservation to be worthwhile to range states, elephants must be seen as having greater value than livestock (Lemieux and Clarke, 2009).

Since many of the citizens of African range states are very poor, it is unreasonable to expect the enforcement of a policy that puts elephant welfare above that of humans (Santiapillai, 2009). Zimbabwe and other range states that support sustainable use proposed changes to the CITES ban that would allow for countries who effectively managed their elephant populations to be able to trade in ivory with the requirement that the proceeds would be used in a manner beneficial to wildlife conservation; this proposal was rejected (Heimert, 1995). The Zimbabwean vision of sustainable utilization of elephants holds that if people have property rights over elephants, they are no longer open access, and if poachers take them they are taking away future profits from the people (Heimert, 1995). So if there is community ownership of the elephant, people have a greater stake in the fate of the elephant. Appendix I status means there can be no profit from culling elephant populations, returning the elephants to the global commons and taking away the incentives for their protection (Heimert, 1995).

## **Obstacles to Effective Enforcement of the Ban**

### *Continued Demand for Elephant Ivory*

The patterns seen in the illegal international trade in elephant ivory follow many of the trends that are apparent in most illicit economies. Illicit economies are extremely hard to eliminate and involve non-state actors who manipulate and evade the reach of even the most powerful governments and international governing bodies (Balaam and Dillman, 2011). Growing economic development in Asia has increased the demand for elephant ivory, even as it has decreased in United States and European Union (Barbier, 1995). China's growing economic prosperity since 1990 has heightened its interest in luxury products made out of ivory (Stiles, 2004). Elephant ivory is also often demanded for use in alternative medicine (UNEP et al., 2013). Hong Kong has a relatively sizeable carving industry that caters to elites all over the globe (Naylor, 2011). Chinese officials claim to strictly enforce the CITES ban, but China remains one of the main destinations for illegal ivory, much of which travels through Chinese middlemen living in Africa, who represent a significant portion of the buyers of raw ivory sold in local markets (Milliken, 2010). As of March 2013, a pound of raw ivory was reportedly selling for over \$1,300 on the Chinese black market (Levin, 2013, para. 24).

Balaam and Dillman (2011) point out that the consumers of illicit goods are just as culpable as the providers, if not more so. Elephants would not be poached if there were no demand for their ivory. In Japan, hanko seals, an important Japanese custom as well as status

symbol, are often made out of elephant ivory (Danaher, 1999). Many Japanese are seemingly unaware of the devastating environmental impacts that their demand for hankos made out of ivory cause. In 1988, 64 percent of ivory coming into Japan was made into hanko seals (Miyaoka, 1998, p. 171). Japan has come under international pressure for its use of ivory. While this pressure decreased demand significantly, there is still an entrenched market on which traffickers capitalize.

Religion is one of the greatest drivers of consumer demand for ivory in Asia. China's great economic growth and greater disposable income has provided the luxury of being able to not only look forward for what they want but also back to the past, specifically back to religious traditions (Christy, 2012). Many Chinese believe that ivory is an ideal material for religious objects, with the rarity and price showing spiritual devotion. A survey carried out by the International Fund for Animal Welfare in 2007 revealed that 70% of Chinese did not know that ivory came from dead elephants (Liljas, 2013, para. 7). As a result several informational campaigns have been carried out in China attempting to inform Chinese citizens that illegal ivory comes from elephants that were illegally killed, not ones that died from natural causes as many people believe (Levin, 2013). Despite these programs, many Chinese remain ignorant of the fact that the ivory they purchase is the result of the killing of elephants, and many still believe that ivory is the elephant's tooth and that it can be pulled out and grow back (Liljas, 2013).

#### *Lack of Infrastructure*

There is no international police force to enforce compliance with CITES regulations; the assumption is that each member state will carry out enforcement at a national level (Favre, 2001). Each country is required to have both a Management and a Scientific Authority, which are in charge of granting permits for trade within CITES appendices (Favre, 2001). If enforcement fails at a national level, however, CITES is severely crippled. One key aspect of enforcement is the ability of range states to properly measure their elephant population numbers and the causes of elephant death. Significant resources are needed to survey both savannah and forest elephant populations and most African governments do not have the funds or the means to carry out proper surveying techniques (Walsh, 1999). The advanced scientific capacity necessary to properly monitor elephant populations would require extensive financial assistance, scientific training, and technical support over an extended period of time.

Congo Basin nations, where forest elephants reside, have some of the worst infrastructure in Africa (Gross, 2007). The combination of poor wildlife management with the large areas of land only accessible by foot make monitoring of elephant populations very difficult. Intense civil conflict also hinders wildlife management (Beyers et al., 2011). During conflicts within or between countries, rule of law is not strictly enforced and environmental crime becomes easier to get away with (UNEP et al., 2013). Feuding sides often engage in elephant poaching to fund their cause with ivory sales as well as to feed their soldiers with elephant bush meat. Conflicts have affected up to two-thirds of forested land in Africa, where forest elephants reside (Beyers et al., 2011, p. 6). The 27 year long civil war in Angola displaced over four million people and also obliterated vast numbers of wildlife (Chase and Griffin, 2011). Since the end of Angola's civil war in 2002, elephant populations have been bouncing back, but there is still the issue of the

uprooted human population, which is now in competition with elephants and other wildlife for land.

Donations from Northern countries, which previously may have invested a significant amount in conservation of elephant populations, are now slowing down because of the perceived success of the ban, taking away funding still crucial for enforcement (Burton, 1999). Yet African wildlife departments desperately need these donations due to the hardships they face from their lack of necessary infrastructure and capital, which limits their capacity to protect wildlife (Blake and Hedges, 2004). Park rangers often face great risks, and should be trained in bush warfare tactics in order to effectively combat dedicated poachers (UNEP et al., 2013).

### *Problems with CITES Itself*

Unregulated domestic ivory markets abound in many countries in Africa, even in those without elephant populations of their own (UNEP et al., 2013). The political challenge of attempting to stop an illicit market is that all unregulated iterations of that market must be eliminated almost simultaneously, or else traffickers will simply travel to another location where enforcement is less stringent (Lemieux and Clarke, 2009). CITES also has no legal enforcement mechanisms of its own; instead it depends on the cooperation of member nations (Danaher, 1999). The system of local enforcement in many consumer countries, including Japan, is very weak, especially once raw ivory is carved up for retail sale (Danaher, 1999). Investigations following seizures are relatively rare, and when they are carried out they tend to be inefficient and ineffective (UNEP et al., 2013). In order to effectively implement the ban, enforcers must know the following: who is poaching, how poachers find the elephants, where they poach, how they transport the ivory, who they sell it to, how they evade law enforcement, how much they are paid for the ivory, and where the ivory is ultimately sold or exported (Lemieux and Clarke, 2009).

One estimate puts the annual cost of wildlife protection at \$305 million across Africa (Heimert, 1995, p. 1481). Some range states, such as Zimbabwe, argue that the revenue from ivory, and other elephant-derived goods, was the only way they could generate enough funds for continuous conservation of elephants (Heimert, 1995). Thus, the ban itself poses an obstacle to its own implementation, since without outside assistance, which is rarely given, most African range states simply do not have the funds to pay for the infrastructure necessary for the basis of conservation, let alone sustained protection efforts.

Articles in the government-owned Zimbabwean newspaper *The Herald* reveal a frustration with CITES for not granting Zimbabwe full capacity to trade in elephants, something many Zimbabwean nationals believe they deserve (Sibanda, 2013). The Zimbabwe Council for Tourism blames the CITES ivory trade ban for the poaching that continues to occur in the country (Sibanda, 2013). This statement came in the aftermath of a deadly string of cyanide poisonings of several elephants in one of Zimbabwe's biggest national parks in 2013. The destruction of elephants as well as other wildlife as a result of the poisonings reiterates the view many Zimbabweans hold that, currently, only the poachers are benefitting from Zimbabwe's rich environmental and wildlife resources (Lubombo, 2013).

The problem does not only lie with CITES, however; the Zimbabwean newspaper *The Standard* reports that several conservationists claim that the cyanide poisonings may have been carried out with the knowledge and support of Zimbabwean government officials (Chimhete, 2013). At least five Zimbabwean cabinet members were accused of being involved. It was not the villagers living near the elephant ranges who purchased the cyanide, people claim, but an organized international crime syndicate that involves high ranking politicians from President Mugabe's Zimbabwean African National Union- Patriotic Front (ZANU-PF) party in addition to prominent wildlife officials.

Other species listed under Appendix I have run into similar problems as the African elephant, usually because they too are highly commercially demanded (Simmons and Kreuter, 1989). For example, the Appendix I listing of several species of Latin American parrots, trafficked illegally as pets, led to their black market price going up and resulted in increased smuggling. The African black rhino faced a similar plight; it was listed as Appendix I in 1976, three years after the creation of CITES. In 1976 there were 50,000 black rhinos in Africa but by 1989 there were only 3,500 (Simmons and Kreuter, 1989, p. 48). The failure of CITES Appendix I to protect many commercially popular species indicates that the issues with blanket bans are not limited to African elephants.

#### *Reservations and Pre-Convention Specimens*

CITES signatories have the ability to take reservations on individual species, which in the case of ivory can be seen as an unfortunate technical loophole to get around the ban (Sands and Bedecarre, 1990). Reservations allow member nations to opt-out of the restrictions of a certain species' listing; they are treated as a non-signatory for that specific species and subsequently can trade it internationally without being subject to CITES restrictions (Heimert, 1995). Reservations are very controversial, though, and other member nations pressure signatories who take out too many reservations to stop. Reservations make the enforcement of the ban more difficult.

When news of the impending Appendix I listing and its subsequent ban on ivory trade became public knowledge, ivory prices dropped considerably and ivory traders were desperate to find buyers for their stockpiles before the ban took effect. Hong Kong, a large part of the ivory retail industry, sent officials to Japan and other nations to lobby them to take out a reservation allowing for trade in ivory from Hong Kong. The United Kingdom acquiesced and took out a reservation for its former colony, a move that was extremely unpopular in the international community. All five of the ivory producing nations that opposed the ban, Zimbabwe, Namibia, South Africa, Botswana, and Malawi, entered reservations, as did China, the only ivory-consuming country to do so (Sands and Bedecarre, 1990). The number of potential buyers that these nations could trade with significantly decreased, however, when many consumer countries such as the United States as well as the nations of the European Union implemented domestic legislation prohibiting the importation of ivory (Burton, 1999). Eventually almost all of the countries that entered reservations on elephant ivory withdrew them, and as of the sixteenth Conference of the Parties held in 2013, Malawi is the only member nation with a reservation on elephant ivory (CITES, 2013b).

The WWF claimed that in 1990 approximately half of the 670 raw tons of ivory in Hong Kong was illegal or unaccounted for (Sands and Bedecarre, 1990, para. 51). The WWF said it was the United Kingdom's duty to rescind their reservation for Hong Kong because the reservation was only granted on the condition that Hong Kong officials strictly control trade in elephant ivory, which they failed to do. The opposition to the United Kingdom's reservation for Hong Kong was largely limited to challenges by NGOs; no CITES parties had a formal response (Sands and Bedecarre, 1990).

There is also a considerable amount of ambiguity within the CITES agreement about the status of pre-convention specimens. Article VII exempts pre-convention specimens from the restrictions of listing under Appendices I, II, or III (Matthews, 1996). This exemption was designed to be fair to ivory stockholders; it would allow them to trade their existing ivory holdings before the ban went into effect. The exemption would also allow continued trade in old, antique ivory specimens. Unfortunately, the pre-convention specimen exception was, and continues to be, abused by many actors, as well as states, who stockpiled large quantities of ivory right before the ban took effect.

As explained above, nations involved in civil wars may be unwilling or unable to properly enforce CITES regulations (Lemieux and Clarke, 2009). Corrupt governments allow, and even assist, poachers in transporting ivory across borders, oftentimes using misappropriated money meant for conservation. Corruption is a significant challenge to the effective enforcement of the ban as it weakens the possibility of feasible legal trade (Bulte et al., 2007).

#### *Local Incentives to Poach*

Paradoxically, the existence of national parks sometimes contributes to poaching. The philosophy behind national parks is one that systematically excludes locals from any involvement or benefit in the existence of the wildlife (Kaempfer and Lowenberg, 1999). The locals see little to no benefits from conservation strategies that exclude them; the only other way they can get some use out of the existence of elephants is to poach them. Low wages amongst officials in charge of the parks means they often look the other way or are even complicit in the poaching. Game wardens may even poach themselves, often out of desperation for food or money.

Property rights also play into the incentive to poach. The legal title of the elephant is given to the range state in which they reside, but since many range states are unable to enforce these ownership rights, elephants become open access resources (Kaempfer and Lowenberg, 1999). CITES suffers from a significant collective action problem, where the benefits of saving the elephants are enjoyed by many, but the costs accrue mainly to those that live in close proximity to the elephants' range (Gehring and Ruffling, 2008). The CITES ban reduces the value of elephants for the people with whom they compete for resources (Freeman and Kreuter, 1994). The popularity of elephants attracts significant international attention and donations, yet this attention has not eradicated the demand for ivory or provided enough funding for conservation.

Only 10 percent of illegal ivory in the world is ever seized (Wasser et al., 2008, p. 1066). Amongst the 13 elephant range states in Western Africa, only 30 ivory seizures have been collectively reported since the 1989 ban; Senegal has not reported any seizures (Milliken, 2010, para. 13). However, 28 tons of illegal ivory suspected of originating from these states has been confiscated as a result of over 1,350 seizures across the globe (Milliken, 2010, para. 13). In comparison to West African range states, countries in Eastern and Southern Africa have reported over 3,300 ivory seizures (Milliken, 2010, para. 14). Ivory seizures cannot help the elephants that have already been killed for their ivory, but the ineffectual seizure system is a signal to criminals that the risks for poaching are not as high as they could be and this, combined with the enormous financial benefits, leads to more elephant poaching (Wasser et al., 2008).

Transnational criminal networks use increasingly porous borders to skirt around law enforcement by adapting their methods and routes in order to avoid apprehension (UNEP et al., 2013). Increased globalization and international trade liberalization has led to commercial and technological developments that increase the ease with which poachers and traffickers can move their product undetected (Wasser et al., 2008). It is especially hard to track an illegal shipment after it leaves its source country. Additionally, the country of export may not be the source country for the ivory. The internet is increasingly being used to facilitate the illegal ivory trade network. In the Philippines buyers and sellers of ivory openly share photos of available goods on social media sites including Facebook and Flickr (Christy 2012).

Kenyan independent newspaper *Daily Nation* points to the increase in Chinese workers as contributing to the increases in both poaching and ivory smuggling through Kenya (Mayoyo, 2013). China has invested in several large construction projects in Kenya in recent years, and many Chinese nationals have relocated to Kenya to work on these endeavors. The Chinese embassy in Nairobi, however, was insistent that it was Kenyan state corruption, especially in agencies involved in wildlife management, which truly caused increased poaching levels. The Chinese embassy also insisted that it was devoted to ensuring that smuggled ivory would not be sent to China explaining that when Chinese tourists land in Kenya's main airport, they receive a text message from the Chinese Ministry of Foreign Affairs reminding them not to buy ivory products (Nation Reporter, 2013).

#### *Lack of Local Incentives for Conservation*

Most locals in range states have no stake in elephant conservation, and many see Western preservationist ideas as counteractive to their own development. If locals do support conservation, it is mainly for the sake of the development of their tourism industry rather than a Western-style desire for the continued existence of the animal itself (Hitch, 1998). The rural poor in range states often directly rely on natural resources, including elephants, for their survival (Wittemyer, 2011). Economic crises can exacerbate the illegal harvesting of elephants, and there is a strong correlation between elephant deaths and economic condition indicators (Wittemyer, 2011). Socio-economic factors play a significant role in the incentives locals have concerning elephant conservation. Poverty in African range states makes it significantly easier for organized criminals to recruit locals into poaching or to bribe, threaten, or partner with local officials in illegal activity (UNEP et al., 2013). Poverty increases the likelihood that impoverished locals can be recruited by criminal networks to participate in poaching, due to their superior knowledge of

the area. The rewards that they glean from assisting criminal poaching groups are small in the grand scheme of ivory trafficking, but for poor villagers these benefits are significant.

The range states holding the utilitarian position, mainly in Southern Africa, claim that the significant decrease in elephant populations in the 1970s and 1980s was due to poor enforcement on the part of East African nations, not the pressures of actual demand for ivory (Ginsberg, 2002). A complete ban, they argue, penalizes range states that were more successful in both protecting and utilizing their elephant populations, while rewarding those who failed to adequately shield their elephant populations from harm. This argument is often employed by Zimbabwe, whose elephant population has been steadily increasing since before the CITES ban took effect, in opposition to states like Kenya, whose elephant populations plunged dramatically in the decades before the ban and have only marginally improved since.<sup>1</sup>

Range states have no way of being compensated for passive use of elephants, but they must bear all of the costs (Bulte and Van Kooten, 1999). The land that has been set aside for wildlife reserves is extremely valuable and, in the eyes of many locals, would be more beneficial for the community if it was devoted to agriculture (Moore, 2010). Namibia insists that the ban ultimately harms its conservation efforts because it reduces the value of the elephant for locals and denies them income that could be reinvested for conservation efforts.

A frequently overlooked cause of illegal elephant deaths is human-elephant conflict, which occurs due to the close proximity of many African villages and towns to the range of elephants. Elephants are often killed because they pose a danger or a nuisance to their surrounding community; these deaths are unrelated to international demand for ivory (Heimert, 1995). The incentives for people to kill elephants in these situations are very different from the incentives poachers have, so the modes of enforcement against this sort of killing must be adjusted accordingly. The killing of elephants for their bush meat is also responsible for a small but growing number of elephant deaths as other forms of bush meat become scarcer and local people become more desperate for food as the result of financial crises (UNEP et al., 2013). For some killing elephants is less of an economically opportunistic venture and more a matter of survival.

### **CITES Approved One-Off Sales and Their Effect on Poaching Levels**

CITES has allowed one-off sales twice since the ban was put into place; the first was approved during the 1997 Conference of the Parties and the second was approved during the 2002 Conference of the Parties (Gross, 2007). The blanket ban on any trade in ivory lasted until the 1997 Conference of the Parties, when it was partially lifted for select range states in Southern Africa in order for them to sell a limited amount of their stockpiled ivory (Kaempfer and Lowenberg, 1999). Some argue that such controlled trade is desirable because it provides incentives for consumer nations to enforce CITES restrictions whereas under the ban they have no benefits; it also allows producer countries to participate only if their populations are suitable

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<sup>1</sup> For a visual representation of the trend in elephant populations in Kenya and Zimbabwe from 1973 to 2011, see Figure 1 in the Appendix.

enough; and finally, if constructed well it can result in more revenue going to the producer state rather than to middle men, which can be reinvested into conservation (Barbier, 1995).

During the 10<sup>th</sup> meeting of the Conference of the Parties in 1997, the status of the trade ban was a major point of contention amongst the different member nations (Walsh and White, 1999). Several countries with large stockpiles of ivory contested the legal basis for the CITES ban, saying that by prohibiting the sale of stockpiles the ban was a retroactive application of the law (Sands and Bedecarre, 1990). As a compromise, CITES started a poaching assessment period, which ended in 1999, and came to the decision that three range states would be approved for a one-off sale from their existing stockpiles of ivory. Based on their stable elephant populations, Botswana, Namibia, and Zimbabwe were allowed to temporarily move their stockpiled ivory to Appendix II status, allowing them to trade with Japan, the approved buyer (Burton, 1999). Tanzania and Zambia also requested to have their elephant populations be down listed, but they were denied (UNEP et al. 2013). There was a set quota of ivory to be traded, specific monitoring requirements to be met, and the revenue from the sale was all supposed to go towards conserving elephant populations in the seller countries (Burton, 1999). TRAFFIC was enlisted to perform independent audits of the process to ensure that no laundering was taking place (Hitch, 1998).

Namibia, Botswana, and Zimbabwe all reported increases in their own elephant populations as a justification for the resumption of trade (Hitch, 1998). They also cited their steadily increasing stockpiles of ivory, from seizures as well as from the culling of problem animals, the value of which was another motivator for the resumption of trade. Japan was chosen as the recipient of the one-off ivory because of its traditional market for ivory, the fact that there was enough national demand to ensure that it could all be consumed internally, and because of their well controlled means through which to manage the sale (Danaher, 1999). Supporters of the ban were skeptical of whether an accurate measure of poaching could actually have been taken in that period of time; especially since forest elephants cannot be surveyed by air (Walsh and White, 1999). Kenya especially worried that even a one-off sale would stimulate enough global demand for ivory that the black market would expand and poaching would increase in all range states (Gross, 2007).

The United States, several African countries, several South American countries, and some Asian countries were against the down-listing to Appendix II status, while Namibia, Botswana, Zimbabwe, Japan, Pacific Island nations, and the former Soviet bloc voted for the down-listing (Hitch, 1998). European Union member nations must vote in a block on CITES decisions or abstain from voting. Since the fifteen European Union member nations could not reach a consensus, they had to abstain from voting, giving the two-thirds majority to those in favor of the down-listing to Appendix II and the subsequent one-off sales. The sales took place in 1999 and 50 tons of government stockpiles were sold to Japanese traders (Stiles, 2004). The ivory sold represented less than 60 percent of the stockpiled ivory that the approved governments possessed from natural mortality, culling, and confiscated ivory (Bulte et al., 2007, p. 613). Revenues from the 1999 one-off sale amounted to around \$5 million (Bulte et al., 2007, p. 613).

Some scholars say the lifting of the ban led to an immediate upsurge in poaching, especially in Zimbabwe, but also in states beyond those approved for one-off sales (Hitch, 1998).

Kenya did see an upsurge in poaching in 1999, mainly near its borders with Somalia (Bulte et al., 2007). While this upsurge in trade occurred in the same year as the initial one-off sale, there is no direct evidence that this was because of the sale (Bulte et al., 2007). Other scholars claimed that after the 1999 sale there was actually a five-year decline in poaching (Milliken, 2010). Despite the fact that conservationists claimed that the previous sale increased levels of poaching, CITES still approved another one-off sale in 2002, this time for Botswana, Namibia, and South Africa (Stiles, 2004). There is little actual evidence that the 1999 one-off sale directly stimulated significant demand for illegal ivory, but this may be due to the limitations of monitoring information (Stiles, 2004). Another criticism is that the one-off sales may have indicated to potential consumers that a resumption in general trade would soon follow, thereby reducing the stigma around the purchase of elephant ivory (Stiles, 2004).

The second one-off sale, which was approved in 2002, finally took place in 2008. The approved states sold 106 tons of ivory and once again all of the profits went towards elephant conservation (Milliken, 2010). Revenues from the 2008 sale totaled around \$15.5 million (UNEP et al., 2013, p.12). China and Japan were both approved as the buyers of the ivory during the second one-off sale (Williams, 2010). Illicit trade has been rising since the 2008 sale, which some see as causation, but illicit trade has actually been rising since 2004, before the sale took place (Milliken, 2010). The WWF (2009) points to the increased involvement of coordinated criminal organizations as a possible explanation for this increase. It appears that one-off sales themselves do not necessarily impact illegal trade to a great extent because there are many other factors at work, and consequently should not be the main focus of those trying to halt illegal trade (Milliken, 2010).

One-off sales can be seen as relieving the pressure building up in range states as a result of their ever-increasing ivory stockpiles (Bulte et al., 2007). The one-off sales may have prevented states from going against the CITES mandate and selling their stockpiles out of frustration with CITES' lack of congruence with their best interests. This line of thought suggests that one-off sales actually decrease the potential for future illicit markets for ivory supported by range states. In regards to the claims that one-off sales could serve as a cover for laundering, it would be extremely difficult to launder ivory in such a situation considering the amount of ivory being traded is set and is all carefully accounted for (Bulte et al., 2007). The cost-benefit analysis of this situation comes down to political judgments on the part of CITES and other member nations on whether a total ban is sustainable in the long term (Bulte et al., 2007).

In 2007 there were an estimated 470,000 to 690,000 wild African elephants (UNEP et al., 2013, 22). Since then there has been another decline in population and the latest estimates are between 419,000 and 650,000 elephants, mostly found in Southern Africa (UNEP et al., 2013, 22). The 1997 down listing came with the stipulation of the creation of two global monitoring systems, Monitoring the Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS), for tracking elephant mortality and trade respectively, and to advise CITES on decisions regarding enforcement of the ban and possible resumption of trade (Burn et al., 2011). MIKE is designed to monitor changes in the elephant population through determination of cause of death (Kahindi et al., 2010). This data is compiled into the Proportion of Illegally Killed

Elephants (PIKE). MIKE tends to be more biased towards protected areas, performing fewer surveys on unprotected land (Blake and Hedges, 2004).

MIKE data from one site in Northern Kenya shows that in a largely unprotected area a minimum of 35 percent of the 389 elephant carcasses found between 2001 and 2003 were illegally killed (Kahindi et al., 2010, p. 972). PIKE data has confirmed that elephants outside of protected areas are in more danger of being poached. ETIS data from after the 1999 one-off sale does show increased trade in illegal ivory, but this can be explained by China's lack of regulation of its own domestic ivory markets, which are difficult to control (Bulte et al., 2007). The crucial difference between the one-off sale of ivory to Japan and the sale of ivory to China is that Japan is a small, island nation while China has an enormous population and borders fourteen surrounding nations, facilitating the smuggling of the legally purchased ivory to neighboring states (Christy, 2012).

The uncertainty surrounding the impact of the second one-off sale is due to the fact that the MIKE system is not fully operational enough to definitively prove whether or not the most recent one-off sale contributed to the intensification of poaching (Stiles, 2004). Until enough data is compiled to show for certain that the one-off sales did not have a significant effect, another one is unlikely to occur. The one-off sales are contentious to begin with and it takes a long time for them to be approved by CITES and then another few years to be carried out. Significant research goes into the approval of one-off sales; it is not a rapid process.

### **State Sovereignty**

State sovereignty is necessarily given up by CITES member nations in order to facilitate conservation. Conservation is inherently about power because it involves the distribution of control over natural and human resources by different actors (Ellis, 1994). The difference between non-detrimental trade and sustainable trade has been extremely contentious (Ginsberg, 2002). Obviously most actors involved in the ivory issue have some degree of interest in the protection of biodiversity given that they are amongst CITES' 177 signatories in the first place (Gehring and Ruffing, 2008). Problems occur because the benefits of protection accrue in different degrees and in different ways to the various actors. State sovereignty is an issue beyond just the enforcement of CITES, and includes decisions on deforestation and increasing agricultural land, both of which decrease African elephants' range (Maisels et al., 2013).

In 1989, the elephant population hovered around 600,000 and was above the level necessary to ensure their survival (van Kooten, 2008, p. 2013). NGOs capitalized on Western sentimentality around nature and simultaneously took away the sovereignty of African nations to decide how to utilize their own natural resources in ways most beneficial to their state and people (Kreuter and Simmons, 1994). Western NGOs have extensive rhetoric on the grave danger elephants face, yet they do relatively little financially to help African nations fund their protection (Kreuter and Simmons, 1994). This phenomenon is a clear illustration of the divide between the meanings and ramifications of conservation for Westerners versus for the residents of African range states. It is very easy for Westerners to demand that elephants be preserved, but their actions fall short of actually providing funding significant enough to allow for conservation let alone preservation.

The characterization of Africans as not caring about the environment oversimplifies an extremely complex situation (Moore, 2010). Both preservationists and utilitarian supporters claim to represent what the residents of range states actually want. Powerful pro-hunting groups have also weighed in, saying that it is imperialist to deny African nations access to their own resources and that hunters are committed to the well being of wildlife, so that they have something to hunt in the future (Naylor, 2011). It may appear that African nations, like Kenya and Tanzania, were the impetus behind the ban, but it was primarily NGOs and Western governments (Moore, 2010). This leads to African locals being stereotyped as ‘environmental villains’ who will not save elephants unless there is something in it for them (Moore, 2010, 19).

African range states have repeatedly been denied the rights to their own wildlife, first during colonialism and later through post-colonial governments continued use of the vestiges of colonial wildlife control strategies (Kreuter and Simmons, 1994). One catalyst behind Zimbabwe’s community based ownership of wildlife was to get rid of the colonial-era idea of wildlife as game for rich white men, and instead emphasize the rights of the people to their own natural resources (Sugg and Kreuter, 1994). The World Bank has proposed the commercialization of national parks, which would give benefits to elites in Zimbabwe, and other range states, but would be disempowering for many others, especially locals, who would lose any control they had over the revenue from their wildlife resources and touristic development (Duffy, 1997).

Countries in Southern Africa point out that it was East African countries’ poor management that led to their plummeting elephant populations in the 1970s and 1980s, not the trade itself (Ginsberg, 2002). It is unfair, in their minds, that they are being punished for the incompetence of East African conservation efforts, when their management techniques were sustainable, while the East Africans are rewarded for inefficiency. The East Africans say a ban was necessary for them to be able to reevaluate and reorganize their strategies of enforcement while poaching pressure was low (Ginsberg, 2002). Southern African nations see a pattern of the control over their resources being held by Western states, which instead of rewarding successful conservation efforts, drives the whole system to cater to the needs of inept governments.

Many lower income nations are frustrated by what they perceive as high income nations’ power to block trade that exporting countries, mostly lower income, deem acceptable (Favre, 2001). As explained earlier, the CITES ban leads to steadily increasing stockpiles of confiscated ivory that cannot be used, which frustrates range states and causes troubles in international negotiations (van Kooten, 2008). Failure to receive adequate income from ivory trade means fewer funds are available to put towards conservation. This is a serious issue since only 1.5 percent of elephants’ 5.9 million square kilometer range is protected (Barbier, 1995, p. 3). Properly monitoring elephant populations requires significant management infrastructure, and personnel to run it, all of which takes years of financial backing, scientific training, and technical support (Walsh and White, 1999).

NGOs play a significant role in CITES’ decision making process (Sands and Bedecarre, 1990). African elephants, as flagship species, are able to garner increased donations as well as draw in funds for other species that do not engender as much interest on their own (Kaempfer and Lowenberg, 1999). Some scholars suggest that contracted NGOs have too much influence

over CITES decisions and do not take into account the needs or capabilities of range states (Reeve, 2006). As has been previously discussed, the West receives the benefit of the existence value of elephants, or the knowledge that elephants live somewhere in the wild, even though Westerners rarely, if ever, come into contact with them in that context (Kaempfer and Lowenberg, 1999).

The very philosophy behind national parks in Africa is inherently exclusive, because it separates the wildlife from locals while simultaneously keeping the parks immaculate for foreign visitors, who are actually allowed to interact with wildlife (Kaempfer and Lowenberg, 1999). Despite the attempts to separate humans and wildlife, elephants still regularly leave the confines of parks, often to the detriment of those nearby. Parks need game wardens and rangers to protect the wildlife, but most African range states are too poor to afford the necessary expenditures to pay these protectors sufficiently. Conservationists estimate that around \$400 needs to be spent per square kilometer to protect elephants and rhinos, yet in the late 1980s even Kenya, which was relatively wealthy for a lower income nation and also very dedicated to preservation, was only spending \$10 per square kilometer (Kaempfer and Lowenberg, 1999, para. 9). This spending is below even the bare minimum, and consequently leads to more corruption amongst those who are supposed to protect the wildlife, the game wardens and rangers, making them more susceptible to bribes to ignore poaching or even to the possibility of participating in poaching activities themselves.

While the corruption resulting from a lack of funding to pay park wardens and rangers could potentially be solved by revenue from sales being put towards conservation, general corruption within African range states as well as buyer nations is not something that can be solved by CITES. CITES' focus is on protecting elephants to the greatest degree possible with the available resources. A total ban is not feasible because there are no benefits accruing to the citizens of African range states and corruption may be siphoning off money intended to protect against illegal poaching. Certainly corruption will still exist if some legal trade is allowed, but that is a necessary, calculated risk to increase the chances of elephants' survival as a species.

In attempts to stem non-compliance with the ban, most of the pressure has been focused on range states rather than buyer states (Reeve, 2006). Many Southern African states want to resume trade to some extent, while other states that experienced more grievous declines in their elephant populations before the ban want to ensure that the ban stays in place, which they believe has and will continue to lead to a reduction in demand for ivory and, subsequently, a decline in the incentive for poaching to a level more manageable for enforcement (Burton, 1999). Both sides have legitimate reasons for their views, so whose should be given higher priority? A certain amount of sovereignty is forfeited by being a member of CITES, but to what extent should certain nations be subject to decisions based on the needs of others?

Kenya clearly benefitted from the ban because before the ban their political and economic turmoil prevented them from being able to fund and maintain effective elephant protection measures (Heimert, 1995). Socially Kenya highly values a large population of living elephants, especially for touristic purposes. The ban was initially extremely effective for Kenya because it stopped the sharp decline in their elephant population, but their continued lack of infrastructure to properly enforce the ban has decreased its efficacy. On the other side of the

spectrum, Zimbabwe was reminded of their all too recent history involving the exclusive parks, primarily run by white Zimbabweans, and moratoriums on killing elephants for food or for protective purposes (Balint and Mashinya, 2006). The CITES ivory trade ban was unpleasantly similar in its demands to the racist restrictions placed on wildlife under the white government's regime. Zimbabwe did not benefit greatly from the ban because their elephant populations were not in danger. The ban may have even undermined the goals of conservation in Zimbabwe because it removed a significant revenue source for seemingly no good reason, making CITES less legitimate in the eyes of many Zimbabweans.

### **Limited Trade as an Effective Method of Facilitating Optimal Elephant Conservation**

#### *Before the Ban*

The Kaokoveld region of Namibia had a rewarding sustainable use program in place in the 1980s, before the blanket ban took effect (Kaempfer and Lowenberg, 1999). The program was designed to address both the poaching of elephants and the poverty of the local people, who had lost most of their agricultural income because of a four-year drought. As the locals became poorer, they depended upon game hunting more for both food and funds. A conservationist in the area enlisted the help of a South African NGO, the Endangered Wildlife Trust, to fund the creation of a Conservation and Development Committee, which collected a \$10 tax per tourist, to hire park rangers, and to enlist locals in the tourism business. The privately funded rangers were much more efficient at catching poachers than government funded ones, and they were so successful at slowing poaching that the elephant population in Namibia was quite high by 1987 and resulted in increased tourism (Kaempfer and Lowenberg, 1999).

#### *After the Ban*

After the CITES ban went into effect, demand swiftly fell in North America, Europe, and Japan through a combination of compelling anti-ivory campaigns, which increased stigma around the sale and purchase of ivory, and by national legislation making imports of most types of ivory, not just the international trade in foreign ivory forbidden under the ban, illegal (Stiles, 2004). Some range states had increasing populations before the ban, and in others, populations continued to fall even after the ban took effect, demonstrating that political and economic factors, in addition to trade legality, determine trade volume. If the ban was successful, then elephant population numbers should have risen across the board, but they did not. Elephant populations have continued to decline in Central and Western Africa, but have increased in Southern and Eastern Africa. The ban, therefore, has failed in the two regions which, incidentally, were the ones that most needed its help in the first place, suggesting that perhaps another strategy, namely sustainable use, is warranted (Stiles, 2004).

The success of the ban does not only hinge upon decreased poaching, but also depends on whether enforcement efforts remain effective (Heltberg, 2001). While the ban has decreased global demand for ivory, it has harmed enforcement because there is more to enforce, but less funding to do so. The ban has not led to the recovery of elephant populations in all range states because the benefits are unevenly distributed (Lemieux and Clarke, 2009). Evidence of continued population decline does not indicate that the ban was useless, though, because if

elephant poaching had continued at the rate it was going before 1989, the decline would be exponentially more severe (Bulte et al., 2007). Despite the many failures of the ban, this curtailment of the rapid population decline may well have prevented the catastrophic and irreversible elimination of elephant populations in certain regions, especially forest elephants. This alone can be seen as making the 1989 ban worthwhile initially.

The former director of Kenya's wildlife service, Richard Leakey, summarized the preservationist justification for the ban by saying that even limited trade is akin to leaving "an open door to further catastrophic poaching" (Kaempfer and Lowenberg, 1999, para. 50). Yet, as has already been pointed out, markets do not function in the way Leakey seems to believe. If anyone demands ivory, a market for it will exist, illegal or legal. The CITES ban deprived African range states of an estimated \$100 million in annual revenues, which, incidentally, is the approximate amount needed to sufficiently protect elephants in parks and reserves (Kaempfer and Lowenberg, 1999, para. 52).

### *CAMPFIRE: The Model of Sustainable Utilization*

Zimbabwe's Communal Areas Management Programme for Indigenous Resources, or CAMPFIRE, is a strategy for the sustainable use of environmental resources through local ownership of wildlife (Frost and Bond, 2008). CAMPFIRE was founded in 1982 by the Zimbabwean government, but did not have enough funding to be functional until 1988, when a local NGO, the Zimbabwe Trust, stepped in to run it (Kaempfer and Lowenberg, 1999). The Zimbabwe Trust focuses on facilitating development through means that do not result in the dependence that international aid agencies often cause. CAMPFIRE was created as a means to give local communities rights to the natural resources in close proximity to them (Frost and Bond, 2008). These communities have control over market access to their wildlife for hunting or for touristic purposes. Under CAMPFIRE, locals can cull some elephants, sell the hunting rights, and set up touristic businesses (Kaempfer and Lowenberg, 1999). Between 1989 and 2001 an estimated \$20 million has been earned by Zimbabwean communities, 89 percent of which was a result of hunting for sport (Frost and Bond, 2008, p. 776).

Rural District Councils, or RDCs, are given control over the rights to the wildlife based on a quota system, which hinges on the population numbers in the district (Frost and Bond, 2008). Higher populations mean higher quotas of elephants that can be utilized, which translates into higher profits for the community. RDCs can sell safari operators the rights to use their land. The guiding assumption behind CAMPFIRE is that the revenues created by community ownership of wildlife present enough of an incentive for the community to adjust their land and wildlife use to sustainable levels. The benefits must outweigh the costs for such a program to work.

One of CAMPFIRE's drawbacks is that it relies on the leadership of RDCs to facilitate the project, and this often results in more authority with the councils than with the people. The CAMPFIRE branch in the Mahenya region of Zimbabwe was one of the most successful at giving power to the community members (Balint and Mashinya, 2006). The Mahenya locals used to elect a council to voice their needs and opinions to the Rural District Councils. However after 2000, political and economic unrest in Zimbabwe led to a decrease in tourism, crippling

CAMPFIRE's main source of income. President Mugabe's poor economic leadership has led to RDCs not having enough money to implement CAMPFIRE correctly and reducing their legitimacy amongst locals (Campbell et al., 2001). In Mahenya the Rural District Council was taken over by the relatives of the local chief, and the citizen led council was disbanded leaving the people in Mahenya with little faith in CAMPFIRE (Balint and Mashinya, 2006).

The revenue from CAMPFIRE is designed to go to the community rather than to the central government (Kaempfer and Lowenberg, 1999). Funds are also used to repay villagers whose crops have been destroyed by elephants. At this point, the majority of the benefits appear to be going primarily to elites within Zimbabwean communities; the poor and women especially are not seeing many benefits at all (Frost and Bond, 2008). Despite this, CAMPFIRE is still a viable model for sustainable use of wildlife. It is still expanding and evolving, so its shortcomings should not be equated with failure.

### *The Level of Success of Limited Sales*

Judging the success of limited sales comes down to what criteria are used to define success. Does limited trade benefiting locals completely eliminate the illicit ivory trafficking, the highest possible level of success? No, it does not. Is it able to slow the decline of elephants in a more effective manner than a blanket ban? Yes; while increasing the stakes and profits for locals in elephant conservation does not completely solve the problem of poaching, it is, simply, the most feasible solution considering the current resources available to the elephant conservation effort. The most successful attempts at consumptive use type programs occur when communities have rights to the wildlife, which counteracts the effects of the open-access status of wildlife. When local people have the rights, more revenue can go back to them, and because they are trading in their own resource, they have a stronger incentive to invest in its protection from illegal harvesting (Kaempfer and Lowenberg, 1999).

A return to open trade would undoubtedly be disastrous for the African elephant population, but a continuation of the blanket ban is also not optimal for the long-term survival of the species (Favre, 2011). The current system of stockpiling confiscated ivory is a financial drain on the governments of range states and increases the incentives to disobey the CITES mandate. Stockpiled ivory represents significant funds that could be put towards conservation efforts, instead of sitting passively in a warehouse or, in extreme cases, being burned by government leaders as a political statement (Favre, 2011). The preservationist perspective does bring up a valid critique that the legalization of any amount of trade has the potential to lead to an increase in demand for elephant ivory. One of the main goals of effective trade should, therefore, be to ensure that legal ivory does not cause demand to rise to the extent that illegal ivory becomes necessary to meet the need (Stiles, 2004).

Since 2007 there has been an increase in poaching levels on par only with what was occurring directly before the 1989 ban (UNEP et al., 2013). Growing demand in Asia, corruption in range states, and increased competition for land use threaten African elephant populations. In their joint report the UNEP, CITES, IUCN, and TRAFFIC all agree that in order to slow this recent upsurge in poaching, more investment needs to be put into capacity development for enforcement and also more effective use of land (2013). While ideally this would be possible

under the complete ban, so far this has not happened, which is why a strategy of sustainable use should be implemented.

Limited trade would have to take into consideration the species of elephant involved, savannah or forest. Forest elephants, mostly in Central African range states, have not been as quick to rebound as savannah elephants, found in Southern range states (Gross, 2007). Limited trade would need to be restricted to states that show high enough elephant populations to handle trade. Consumer education is also a key facet of effective limited trade. Complete comprehension of the consequences of buying poached ivory should be made abundantly clear to consumer nations as part of a continuous attempt to decrease demand (Gross, 2007).

The most feasible method of sustainable use would be to return the African savannah elephant to Appendix II status while continuing consumer education campaigns as well as controlling the amount of savannah elephants that can be traded through quotas whose enforcement and success would be monitored through MIKE and ETIS data. Before the 1989 ban a system of quotas was attempted, but failed largely because countries set their own “sustainable yield” quotas (Naylor, 2011). Now with the advent of data from MIKE and ETIS, CITES would have enough information to set quotas for nations housing savannah elephants, ensuring that the quotas accurately reflected elephant population levels. Community- owned elephant ranges could provide the quotas of elephant ivory to ensure that locals would have a stake in cooperating with the CITES mandated limits.

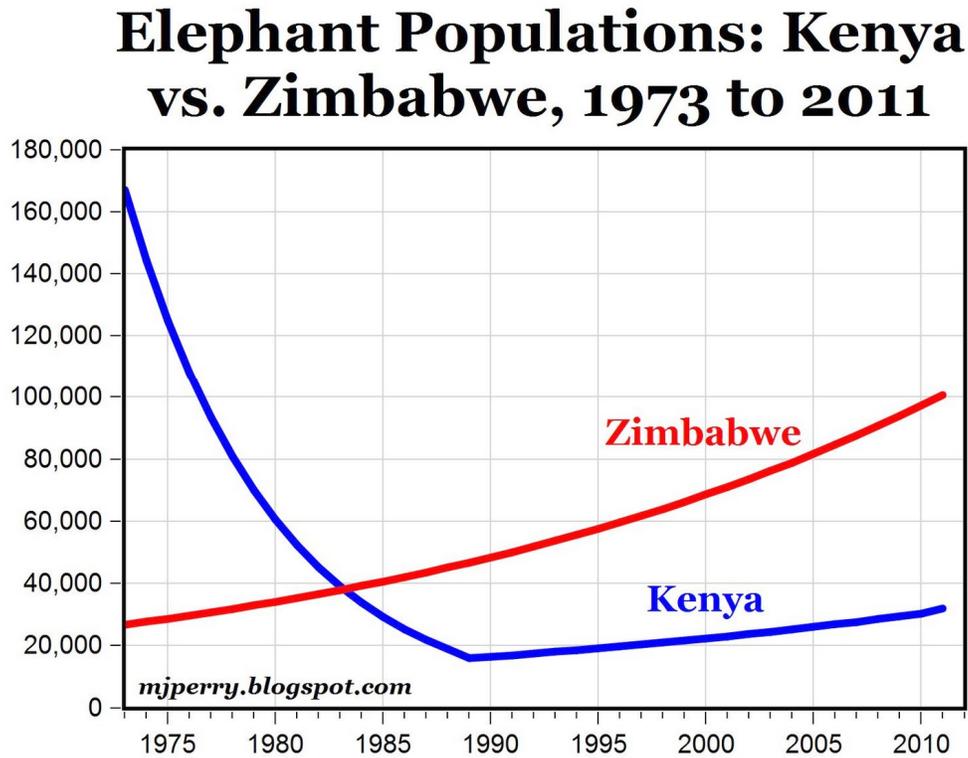
## **Conclusion**

In response to my central question regarding the circumstances under which limited trade allowed under the CITES ivory trade ban is an effective strategy to stall the illicit trafficking of elephant ivory, I have found that while the CITES ban was initially successful in slowing the rapid decline in African elephant numbers, it has not been equally successful as a long term method for eliminating the global ivory trade. Consumptive use of wildlife allows for the money made from the sale of elephant ivory to be reinvested into the protection of the greater elephant population. While both of the one-off sales conducted under the CITES ban resulted in funds for conservation, more is needed to effectively sustain elephant populations. Moving savannah elephants from Appendix I to Appendix II would allow for sustainable trade in a less threatened population of African elephants. Community based ownership of elephants, as exemplified by Zimbabwe’s CAMPFIRE program, would grant communities benefits from protection of their natural resources and would allow elephant populations to exist at a stable, sustainable level.

While the concept of sustainable use may be unattractive to some, it is the only realistic way to maintain sustainable elephant population levels. African range states simply do not have the infrastructure necessary to enforce a blanket ban without significant financial assistance, which Western nations are unwilling to provide. Sustainable use allows for the funds for elephant conservation to be generated by elephants themselves. While utilitarian strategy of community-based rights to elephants is certainly no panacea, it is the most feasible option currently available. More research should be done on the ability of different range states to follow Zimbabwe’s lead and implement a system of community ownership and sustainable use.

## Appendix

**Figure 1:** A comparison of elephant populations in Kenya and Zimbabwe from 1973 to 2011 (Perry, 2011).



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