

NOTE

TWO BIRDS WITH ONE SHOT: THE CASE FOR EXPANDING PRIVATE PROPERTY RIGHTS UNDER *CITES* TO PROMOTE ECONOMIC DEVELOPMENT AND CONSERVATION IN THE CONGO BASIN

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I. INTRODUCTION

In March 2008, scientist and internationally renowned conservationist Jane Goodall called bushmeat hunting “the number one threat in [the] Congo Basin area.”¹ Ms. Goodall was referring to the animal extinction and resulting environmental consequences that could come to pass from the millennia-old practice of hunting wild animals in the forests of Central Africa. Hunters in the rainforests have been harvesting meat from wild animals such as gorilla and antelope (“bushmeat”) for generations without harmful consequences.² Present circumstances, however, have twisted bushmeat harvesting into an untenable practice. International policymakers have spearheaded efforts to save threatened species, particularly gorillas, but have been unable to halt the species’ slide into extinction.³

Bushmeat hunting, the harvesting of wild forest animals for meat and other products such as hides, is a practice common in West and Central Africa,⁴ including the Congo Basin region.⁵ Wildlife harvesters, hunters, and their families either eat the meat they harvest or sell it for profit.⁶ Recent growth of this practice in the Congo Basin has brought the great apes to the edge of extinction, despite international efforts to protect wildlife reserves by curbing hunting rates.⁷

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1. Joe Bauman, *Chimps in Trouble, Goodall Says*, DESERET MORNING NEWS (Salt Lake City), Mar. 4, 2008, at A1.

2. *Id.*

3. *See infra* Part III.

4. GHANA WILDLIFE SOCIETY, WEST AFRICA BUSH MEAT CONFERENCE, TACKLING THE BUSHMEAT CRISIS IN AFRICA 21–22 (2006), available at <ftp://ftp.fao.org/docrep/fao/009/ag868e/ag868e00.pdf>.

5. The region includes the Democratic Republic of Congo (Congo), the largest and most influential country in the region politically and economically, as well as the smaller nations of the Republic of Congo (Congo-Brazzaville), Cameroon, and Gabon.

6. *See* Johannes Refisch & Inza Koné, *Market Hunting in the Taï Region, Cote d’Ivoire and Implications for Monkey Populations*, 26 INT’L J. OF PRIMATOLOGY, 621, 622 (2005).

7. *See generally* John Charles Kunich, *Fiddling Around While the Hotspots Burn Out*, 14 GEO. INT’L ENVTL. L. REV. 179 (2001).

Researchers conducting a study in 2009 estimated that gorilla hunting, for example, had increased so severely that four percent of gorilla populations in the Congo Basin are killed each month.⁸ This hunting rate is fueled by the widespread trade of bushmeat, which averages six times the sustainable rate for current populations.⁹ Efforts to curb the practice include a mixture of multilateral treaties, pressure to implement domestic law, and an assortment of grassroots initiatives.¹⁰

The Convention on International Trade in Endangered Species of Flora and Fauna (CITES) is the major treaty aiming to stop the practice of hunting endangered species for bushmeat.¹¹ CITES attempts to restrict the supply of bushmeat to international markets by limiting trade and making bushmeat hunting illegal.¹² CITES fails to achieve its goal in the Congo Basin because its effectiveness is undermined by local dynamics including prolonged conflict, lax enforcement, and unchecked internal demand. Communities rely on wildlife reserves to maintain traditional hunting practices, which play a vital cultural and economic role in community life. As their name suggests, subsistence hunters harvest wildlife to survive. Rural harvesters have few other sources of income, demand for bushmeat continues, and the supposedly strict regulations on hunting are ineffectively enforced, making the probability of punishment negligible. These combined factors incentivize villages to maintain or even increase the current high levels of harvesting.

The disappearance of wildlife harvested for bushmeat would have wide-reaching economic, environmental, and cultural consequences for the people in these communities. An enforced ban on bushmeat hunting also would cause harm. Any outright ban on bushmeat hunting to protect wildlife, even if it were enforceable, would not be desirable because it would remove the cornerstone of the local economy and have wide-reaching consequences for the livelihood and culture of rural villagers. Protective measures must be achieved in a manner that does not strike a blow against the food security and culture of villagers who have

8. *Scale of Gorilla Poaching in Congo Exposed*, THAIINDIAN NEWS (Sept. 17, 2009, 12:39:11 AM), http://www.thaindian.com/newsportal/health/scale-of-gorilla-poaching-in-congo-exposed_100248643.html.

9. Andrew E. Kohn & Heather E. Eves, *The African Bushmeat Crisis: A Case for Global Partnership*, 30 ENVIRONS ENVTL. L. & POL'Y J. 245, 249 (2007).

10. See Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 993 U.N.T.S. 243 [hereinafter CITES]; Andrew J. Plumptre et al., *The Current Status of Gorillas and Threats to their Existence at the Beginning of a New Millennium*, in *GORILLA BIOLOGY: A MULTIDISCIPLINARY PERSPECTIVE* 414, 420 (Andrea B. Taylor & Michele L. Goldsmith eds., 2003) (describing the International Union for the Conservation of Nature's reclassification of the gorilla's status); see also David S. Wilkie & Julia F. Carpenter, *Bushmeat Hunting In the Congo Basin: An Assessment of Impacts and options for Mitigation*, 8 BIODIVERSITY & CONSERVATION 927 (1999) (proposing various solutions for mitigation).

11. CITES, *supra* note 10.

12. *Id.*

depended on meat and other products harvested from wild animals for generations.

Scholars, non-governmental organizations (NGOs), and other commentators have recognized the weaknesses of CITES and have proposed a number of potential solutions to this Gordian knot¹³ of poverty, market demand, and supply. These proposed solutions include new legal classifications for gorillas, protein, and revenue programs to reduce villagers' dependence on wildlife and define more specific penalties for treaty violations.¹⁴ This Note shows that, despite the good intentions of these plans, it is highly unlikely that any would be effective. Effective and sustainable¹⁵ solutions must be decentralized and tailored to the local conditions through on-the-ground negotiation between actors and stakeholders in the local communities such as villagers, local governments, and private foreign enterprises. NGOs may be able to play the role of negotiators, helping to hammer out agreements between the stakeholders, monitoring the effectiveness of the treaty, and even arbitrating disputes.

Any truly effective measure must account for and harness the same microeconomic forces that push hunting rates to unsustainable levels and use them to spur conservation and fuel economic development in rural villages. Creating a private property rights framework and investing villagers with property rights over the wildlife resources could save both villages and gorillas. This would give villagers legitimate power to manage wildlife resources and, by forcing them to internalize the environmental costs of killing wildlife, give them an incentive to harvest at sustainable levels. Furthermore, international demand for bushmeat, unfettered by restrictive treaties, would drive up prices and allow villagers who are able to claim ownership of the animals to trade and profit from them. This would incentivize rural villagers to protect wildlife resources, allow them to provide for their families while hunting less, provide additional income to invest in their communities, and permit them to develop beyond subsistence.

This Note argues that the current efforts have failed because external legal pressures have little effect on community decision-making and fail to address local dynamics that affect bushmeat demand and dictate the decisions of villager hunters. Part II shows how past and present socioeconomic conditions in the Congo Basin are pushing gorillas toward extinction and discusses potential consequences attending such an event. Part III posits that CITES is an ineffective attempt to save gorillas because it does not address existing economic conditions in rural areas. Part IV analyzes several proposed solutions and frameworks for

13. The Gordian knot, supposedly impossible to untie, was an obstacle encountered by Alexander the Great in his conquests. Legend would have it that Alexander solved the unsolvable problem with a single stroke of his sword. See JOHN MAXWELL O'BRIEN, *ALEXANDER THE GREAT: THE INVISIBLE ENEMY: A BIOGRAPHY* 70–72 (1992).

14. See *infra* Part III.B.

15. A sustainable practice is one which is perpetuated over the long term. See SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY, *CONSERVATION AND USE OF WILDLIFE-BASED RESOURCES: THE BUSHMEAT CRISIS* 7 (2008), available at <http://www.cbd.int/doc/publications/cbd-ts-33-en.pdf>.

rights of access and how they might be effectively utilized to establish a system of incentives for sustainable practices that benefit communities without endangering wildlife resources. Part V concludes by showing that a framework that invests private property rights in a community corporation would be the most effective device for conservation in the Congo Basin.

II. HISTORY OF BUSHMEAT HUNTING AND MODERN TRENDS

An analysis of bushmeat hunting must begin with its historical origins and then weigh the impact of modern forces on traditional demographics and social structures. All combine to make bushmeat hunting in the Congo Basin particularly difficult to eradicate and threaten the future of gorillas and other animals.¹⁶

A. The Tradition of Gorilla Hunting

Rural villagers in the Congo Basin hunt gorillas and other wild animals for bushmeat in an age-old tradition¹⁷ rooted in both cultural practice and the need for food and other wildlife products.¹⁸ Animal species hunted for bushmeat in the Congo Basin include various species of elephant, monkey, antelope, fowl, rodent, and others;¹⁹ gorillas are one of the most vulnerable species. Bushmeat has strong cultural significance for local villagers as a force in traditional rites of passage,²⁰ with the hunting of bushmeat playing an important role in integrating young men into traditional societies,²¹ including through coming-of-age rituals.²² Bushmeat also has substantially contributed to the protein in diets all over Africa since

16. *Id.*

17. Food and Agric. Org. of the U.N., Twenty-Third Regional Conference For Africa, *The Bushmeat Crisis in Africa: Conciliating Food Security and Biodiversity Conservation in the Continent*, ¶ 1, U.N. Doc. ARC/04/INF/7 (Mar. 5, 2004) [hereinafter FAO Regional Conference Report].

18. Elizabeth L. Bennett, *Social Dimensions of Managing Hunting in Tropical Forests*, in WILDLIFE AND SOCIETY: THE SCIENCE OF HUMAN DIMENSIONS 289 (Michael J. Manfredo et al. eds., 2009).

19. Kohn & Eves, *supra* note 9, at 248.

20. Julius Mbotiji, *Sustainable Use of Wildlife Resources: The Bushmeat Crisis 7* (U.N. Food & Agric. Org., Wildlife Management Working Paper, Paper No. 5, 2002), available at <ftp://ftp.fao.org/docrep/fao/010/ai569e/ai569e00.pdf>.

21. *Id.*

22. *Id.*

prehistoric times and continues to do so to this day.²³ It remains essential to the sustainability of the rural poor.²⁴

Harvesters do not desire the extinction of the gorilla or other animals. Hunting occurred for hundreds of years without endangering animal species,²⁵ but beginning in the second half of the twentieth century,²⁶ cultural and economic changes stimulated harvesting to a pace that threatens the long-term survival of wildlife resources on which villagers depend.²⁷ In fact, the practice has become one of the greatest dangers that protected species face.²⁸ The threat is particularly high for gorillas because of the animals' morphology and behavior.²⁹ Although community members hunt a wide variety of game,³⁰ gorillas' great size makes them more valuable because each animal nets a large amount of meat. In addition, while gorillas are large and dangerous at close range, they are slow, which makes them easy targets. The ease of the hunt and the size of the take give the gorilla the unfortunate status of being a prime kill. Gorillas are more vulnerable to extinction than other bushmeat species because periods of both gestation and maturation of gorilla young are significantly longer than for other hunted species; they mature over a period of about 15 years.³¹ As a result, the population takes longer to rebound when numbers decrease. These factors put gorillas in a precarious situation.

B. The Impact of Unrest

Compounding the gorillas' predicament are many changes that have exacerbated bushmeat hunting levels, beginning with colonialism and the decades

23. YAA NTIAMOA-Baidu, U.N. FOOD & AGRIC. ORG., WILDLIFE AND FOOD SECURITY IN AFRICA ¶ 1 (1997).

24. Bennett, *supra* note 18, at 289.

25. Kunich, *supra* note 7, at 249–50.

26. Because of scant data on animal populations and social practices in rural areas of the Congo Basin, it may be difficult to identify a precise turning point in the practice.

27. Fred Turner, *Africa's Deadliest Conservationist*, NAT'L GEOGRAPHIC: ADVENTURE, Jan./Feb. 2002, http://www.nationalgeographic.com/adventure/0201/q_n_a.html.

28. William Olupot et al., *An Analysis of Socioeconomics of Bushmeat Hunting at Major Hunting Sites in Uganda 2* (Wildlife Conservation Soc'y, Working Paper No. 38, 2009).

29. See Melissa J. Remis, *Are Gorillas Vacuum Cleaners of the Forest Floor? The Roles of Body Size, Habitat, and Food Preferences on Dietary Flexibility and Nutrition*, in *GORILLA BIOLOGY: A MULTIDISCIPLINARY PERSPECTIVE* 385, 398–99 (Andrea B. Taylor & Michele L. Goldsmith eds., 2003).

30. FAO Regional Conference Report, *supra* note 17, ¶ 19 (common targets are antelope, rats, and other small animals).

31. JARED DIAMOND, *GUNS, GERMS, AND STEEL: THE FATES OF HUMAN SOCIETIES* 169 (1997).

of bloody civil war, revolution, and insurgency that followed.³² In the nineteenth century, Belgium and France colonized the Congo Basin and enacted a mercantilist agenda to exploit the region's immense natural resources.³³ In 1960, the Congo gained its independence from Belgium,³⁴ sparking a continued battle for control of precious natural resources. The past half century of armed conflict stemmed, in large part, from different groups fighting to control the region's timber and minerals.³⁵ Instability and violence helped transform the bushmeat trade from what it had been for generations.

Internal strife began soon after independence, when the resource-rich southern province of Katanga attempted to secede from the Democratic Republic of Congo.³⁶ This move, incited and supported by the government of Belgium, led to a civil war that the central government eventually succeeded in quelling.³⁷ Although Katanga failed to secede, cultural, ethnic, and national lines were drawn, and they persist to this day.³⁸ The internal conflicts illustrated by the 1960 uprising soon manifested again in larger-scale conflicts during the Cold War between the United States and United Soviet Socialist Republic (Soviet Union).³⁹

Congo, as the third largest country in Africa, then became a major battleground during the Cold War.⁴⁰ Like the French and Belgian colonists before them, the United States and Soviet Union exploited ethnic differences for their own political and economic ends.⁴¹ The United States supported Mobutu Sese Seko, a dictator who suppressed the Marxist rebellion for twenty-five years.⁴² Violence continued to ravage the Congo Basin after the end of the Cold War.⁴³ In 1996, during the genocide in neighboring Rwanda, refugees and militias fled into eastern Congo.⁴⁴ This helped ignite a conflict that is still ongoing (as of 2011) and has caused more deaths than any conflict since World War II.⁴⁵ Journalist Simon

32. Mbotiji, *supra* note 20, at 8; *Primate Declines Put Forest Ecosystems at Risk*, VOICE OF AM., May 27, 2008, <http://www.voanews.com/english/news/a-13-2008-05-27-voa27.html> [hereinafter *Primate Declines*].

33. DIDIER GONDOLA, *THE HISTORY OF THE CONGO* 120 (2002).

34. *Id.*

35. *Id.* at 113.

36. *Id.*

37. *See generally id.* at 115–29 (giving the history of the post independence civil war).

38. GONDOLA, *supra* note 33, at 113.

39. *See generally id.* at 132–62 (narrating the Cold War period in the Democratic Republic of Congo).

40. *Id.*

41. *Id.*

42. *Id.*

43. Simon Robinson, *The Deadliest War in the World*, TIME, May 28, 2006, available at <http://www.time.com/time/magazine/article/0,9171,1198921,00.html>.

44. *Id.*

45. *Id.*

Robinson called it “The Deadliest War in the World.”⁴⁶ The conflict has seen two separate invasions by Rwanda and Uganda; the overthrow of Mobutu by Laurent Kabila; the assassination of Kabila, and the ascension of his son, Joseph; a multiparty peace agreement brokered by the U.N. that led to the withdrawal of Rwandan and Ugandan forces; continued rebel uprising; the first multiparty elections in forty years; and millions dead.⁴⁷ The gravity and widespread effects of prolonged conflict cannot be underestimated. Journalist Nicholas D. Kristof recently called the crisis “the most lethal conflict since World War II” and estimated the casualties at 5.4 million as of April 2007.⁴⁸

The prolonged conflict has distorted the Congo Basin bushmeat trade in myriad ways.⁴⁹ The hostilities have ensured that a large number of guns are circulating in rural communities.⁵⁰ The increased supply of guns has permitted hunters to upgrade their hunting technology from nets, spears, and arrows to automatic rifles and pistols.⁵¹ As a result, subsistence hunters can kill more bushmeat with less effort. In addition, soldiers from various factions and war-displaced refugees hunt to feed themselves.⁵² Rebels have been harvesting in significant numbers since the 1960s.⁵³ Both the army of the current regime and rebels support themselves off the land, harvesting wildlife. Refugee populations displaced by the conflict have caused bushmeat demand to spike.⁵⁴

46. *Id.*

47. *Id.*; Benjamin Coghlan et al., *Mortality in the Democratic Republic of Congo: A Nationwide Survey*, 367 LANCET 44, 44 (2006); James Butty, *A New Study Finds Death Toll in Congo War Too High*, VOICE OF AM., Jan. 21, 2010, <http://www.voanews.com/english/news/africa/butty-congo-war-death-toll-questioned-21jan10-82223332.html>.

48. Nicholas D. Kristof, Editorial, *Orphaned, Raped and Ignored*, N.Y. TIMES, Jan. 31, 2010, at WK11.

49. See Dirk Draulans & Ellen Van Krunkelsven, *The Impact of War on Forest Areas in the Democratic Republic of Congo*, 36 ORYX 35 (2002) (describing the Congolese conflict’s intensification of the population’s dependence on bushmeat for protein); Eliza Barclay, *African Refugees Spurring Bushmeat Trade*, NAT’L GEOGRAPHIC NEWS, Jan. 22, 2008, <http://news.nationalgeographic.com/news/2008/01/080122-refugees-bushmeat.html> (depicting heavy trading of bushmeat resources in refugee camps caused by the Congolese civil war).

50. Chris Wold, *World Heritage Species: A New Legal Approach to Conservation*, 20 GEO. INT’L ENVTL. L. REV. 337, 338–39 (2008); Mario del Baglivo, *CITES at the Crossroad: New Ivory Sales and Sleeping Giants*, 14 FORDHAM ENVTL. L.J. 279, 283–84 (2003).

51. Mbotiji, *supra* note 20, at 8; *Primate Declines*, *supra* note 32.

52. Plumptre et al., *supra* note 10, at 420–21.

53. *Id.* at 420.

54. *Id.* at 423.

C. The Impact of Additional Resource Exploitation

Colonialism created other demographic shifts that would, decades later, prove devastating to the region's wildlife. While the region was occupied by France and Belgium, the largesse gained from the exploitation of natural resources flowed into urban and colonial centers of power.⁵⁵ The concentration of resources in the cities caused a decline in rural standards of living and sent rural people flooding into the cities.⁵⁶ Urban communities must import food harvested elsewhere,⁵⁷ and the new city dwellers did not abandon the traditions of the rural lifestyle, including eating bushmeat.

Before the civil war, urban consumers' desire to purchase and eat rural bushmeat⁵⁸ had little effect on its value because poor national infrastructure inhibited economic connections between rural supply and urban demand; trade was insignificant.⁵⁹ The introduction of logging enterprises into remote areas, however, brought roads that connected forest sources with urban markets that demanded both timber and bushmeat.⁶⁰ Improved supply channels between the markets have allowed urban demand for bushmeat to increase and in turn, increase bushmeat's economic value. This infrastructure improvement meant that bushmeat hunters were no longer confined by limited demand from local markets, and thus the incentive to increase their harvesting rates spiked.⁶¹

In addition to improved infrastructure spurring demand and opening channels for bushmeat trade, logging and mining operations, which are often foreign and operate with permits negotiated with the central government,⁶² placed strain on forest ecosystems via deforestation and population increases.⁶³ The deforestation rate in Africa is the second highest in the world,⁶⁴ and as gorilla habitat disappears,⁶⁵ it puts additional stress on gorillas by limiting their food as well as areas from which to evade hunters. These operations also bring workers and heavy equipment into the forests, set up sleeping facilities for these numerous

55. Mbotiji, *supra* note 20, at 9.

56. *Id.*

57. See, e.g., David Edderai & Mireille Dame, *Short Communication: A Census of the Commercial Bushmeat Market in Yaoundé, Cameroon*, 40 *ORYX* 472, 472-75 (2006) (depicting urban importation of rurally harvested bushmeat in the capital of Cameroon).

58. See Michelle Schenck et al., *Why People Eat Bushmeat: Results for a Two Choice, Taste Tests in Gabon, Central Africa*, 34 *HUM. ECOLOGY* 433, 435 (2006).

59. *Primate Declines*, *supra* note 32.

60. *Id.*; Wilkie & Carpenter, *supra* note 10, at 939.

61. GONDOLA, *supra* note 33, at 9.

62. *Id.*

63. *Id.*

64. *Rate of Forest Loss in Africa Second Highest in the World*, 21 *NATURE & FAUNE*, no. 1, 2006, at 10 (stating that the net rate of forest loss in Africa is the second highest in the world).

65. See GREENPEACE UK, CARVING UP THE CONGO (2007), <http://www.greenpeace.org.uk/media/reports/carving-up-the-congo>.

employees, and build processing facilities for the timber products.⁶⁶ Infrastructure knows no bounds and has intruded into formerly inaccessible remote areas.⁶⁷ Construction disrupts the forest ecosystem, and logging workers are typically too busy to grow food themselves, and instead consume bushmeat, either hunting themselves or purchasing from other hunters.⁶⁸ Logging operations thus shrink animals' natural habitat while further increasing demand for their meat.⁶⁹

D. Enforcement Failure, Need for Food Leaves Hunting Levels Unimpeded

Local law enforcement is simply unable to police the ban on bushmeat hunting. Hunting often occurs openly,⁷⁰ but due to the deep social linkages lacing villages through family ties, common interest, or complicity,⁷¹ villagers are not inclined to report illegal activity. In addition, park rangers have little incentive to enforce the ban. Wildlife parks and reserves are under-funded and understaffed, so park rangers are poorly paid and poorly supervised,⁷² increasing the likelihood of corruption. Hunters are obviously armed, and rangers' attempts to engage and apprehend them can be dangerous. The combination of easy money and self-preservation makes it easy for park rangers to avoid enforcing hunting regulations.

Without law enforcement and potential legal punishment to serve as a disincentive, illegal commercial hunters, or poachers, are free to hunt. The high value of bushmeat, combined with the low risk of getting caught, made commercial hunting a viable enterprise.⁷³ Commercial hunters are well armed and organized and hunt only for profit.⁷⁴ Commercial hunters are driven by demand from urban centers, where restaurants often serve dishes with bushmeat ingredients.⁷⁵ Rural subsistence hunters typically have no direct contact with urban buyers because restaurants obtain their bushmeat supply from commercial hunters or middlemen who use the road infrastructure built by private companies to connect their remote operations to urban centers and markets.⁷⁶

Subsistence hunters, despite recent increases in the availability of modern weaponry, are still rarely as well-armed and organized as poachers.⁷⁷ But poverty

66. *Id.*

67. NTIAMOA-BAIDU, *supra* note 23, ¶ 4.2.2.

68. Olupot et al., *supra* note 28, at 4.

69. Mbotiji, *supra* note 20, at 5.

70. NTIAMOA-BAIDU, *supra* note 23, ¶ 3.1.2.

71. Y.C. Madzou & M.O. Ebanega, *Wild Game and Its Use in the Tropical Environment, Cameroon*, 21 NATURE & FAUNE, no. 1, 2006, at 18, 26.

72. Plumptre et al., *supra* note 10, at 425.

73. Rachel L. Polikoff, Note & Comment, *One Minute to Midnight – GRASP and the Kinshasa Declaration Implement Critical Measures to Save Great Apes*, 18 COLO. J. INT'L ENVTL. L. & POL'Y 217, 225–26 (2007).

74. Madzou & Ebanega, *supra* note 71, at 29.

75. *Id.*

76. *Id.* at 26.

77. *Id.*

and lack of food alternatives force them to continue the hunt.⁷⁸ Despite attempts to clamp down on bushmeat harvesting in Africa, subsistence hunting accounts for over ninety percent of the bushmeat supply.⁷⁹ Internal village economics leaves hunters little choice. There are not enough resources in villages to import food from far away urban centers.⁸⁰ Even if there were stores stocked by commerce, villagers could not afford to buy food; they must make do with the options at hand.⁸¹ The easy access to surrounding forest ecosystems and the wildlife within them make harvesting wild animals the only viable option. After harvesting, subsistence hunters can either consume their game or put it on the market to purchase less expensive protein.⁸²

Outside enforcement of CITES provisions also is lacking. The treaty provides enforcement mechanisms between members, but it is not surprising that the range nations have not been called out for their shortcomings. As Jared Kassenoff argues, party nations bear the financial, political, and administrative burdens of enforcing the treaty against other parties, so these nations are understandably reluctant to bring suits against other nations.⁸³ Litigation would take place far away, at the International Court of Justice, in The Hague, carrying a high cost to both nations in legal fees and travel and hospitality costs. There also would be a high probability of aggravating the accused nation for dragging them to court over a resource, which, though considerably valuable to community members, is of limited financial importance to national governments. The nations of the Congo Basin have a lot of needs to fill with limited resources, and allocating a significant amount of money to make sure that other nations are fulfilling their conservation obligations is not a high priority.

E. The Consequences of Species Extinction

The hunters' short-term dependence on bushmeat for day-to-day survival and the many incentives to harvest the resource immediately for maximum profit stand in direct conflict with the communities' long-term need to protect gorillas and other wildlife and the ecosystems that support them. The extinction of gorilla and other animal species in the forests of the Congo Basin would have drastic

78. Kohn & Eves, *supra* note 9, at 247.

79. NTIAMOA-BAIDU, *supra* note 23, ¶ 4.2.2.

80. See Emmanuel de Merode et al., *The Value of Bushmeat and Other Wild Foods to Rural Households Living in Extreme Poverty in the Democratic Republic of Congo*, 118 *BIOLOGICAL CONSERVATION* 573–81 (2004).

81. Cf. Lilian Apaza et al., *Meat Prices Influence the Consumption of Wildlife by the Tsimane Amerindians of Bolivia*, 36 *ORYX* 382–88 (2002) (describing a study of comparable practices in South America).

82. Mbotji, *supra* note 20, at 4.

83. Jarred Kassenoff, Note, *Treaties in the Mist*, 7 *CARDOZO J. INT'L & COMP. L.* 359, 368 (1999).

consequences for the region's people. The loss would result in a substantial economic loss to villagers, increase their risk of hunger, undermine age-old cultural practices, and harm the region's rich biodiversity.

Wild animals contribute significantly to local economies. Rural populations rely on bushmeat as their main source of protein,⁸⁴ and villagers build their economies through "hunting, crafts and trade based on wildlife products."⁸⁵ In farming communities, income from wild animals is a major part of the economy through local trade of wildlife products.⁸⁶ Bushmeat animals also contribute to the national economy through tourism⁸⁷ because wildlife can draw tourists into rural areas for controlled hunts or sightseeing.⁸⁸ Gorillas' extinction would not only remove a direct source of food, but it also would eliminate income that villagers use for purchasing other types food. The loss of gorillas would therefore pose a considerable detriment to rural providers trying to feed their families with either bushmeat directly or with protein purchased with income gained from gorilla-dependent products.

Gorilla extinction further would damage the ecosystem of the entire Congo Basin. Gorillas are an integral part of the region's ecosystem, and many plant species are dependent on gorillas for fertilization and seed spreading.⁸⁹ The gorillas' diet is composed of different fruits containing seeds that the apes either discard after eating or swallow, later excreting them in their feces, which acts as a fertilizer.⁹⁰ Significantly, gorillas spread fertilized seeds over wide areas due to their migration patterns.⁹¹ By fertilizing and distributing seeds, gorillas serve an important function in the jungle ecosystem and facilitate the spread and growth of various fruit species. In turn, other animals in the forest ecosystem rely upon these fruit species. Thus, the loss of gorillas would unbalance entire forest ecosystems.⁹²

Domestic demand from urban centers, rural communities, and imported workers keep both subsistence hunters and poachers on the take and drive unsustainable bushmeat hunting levels. Factors such as prolonged conflict, improved infrastructure, and demographic shifts further exacerbate the problem, while laws outlawing the practice can do little to stop bushmeat hunting when there are few resources and precious little willingness to enforce the laws, either

84. NTIAMOA-BAIDU, *supra* note 23, ¶ 2.

85. *Id.* at ¶ 1.

86. Mbotiji, *supra* note 20, at 5.

87. NTIAMOA-BAIDU, *supra* note 23, ¶ 1.

88. Mbotiji, *supra* note 20, at 4.

89. Melissa J. Remis, *Are Gorillas Vacuum Cleaners of the Forest Floor? The Roles of Body Size, Habitat, and Food Preferences on Dietary Flexibility and Nutrition*, in *GORILLA BIOLOGY: A MULTIDISCIPLINARY PERSPECTIVE* 385, 399 (Andrea B. Taylor & Michele L. Goldsmith eds., 2003).

90. *Id.*

91. ALEXANDER H. HARCOURT & KELLY J. STEWART, *GORILLA SOCIETY: CONFLICT, COMPROMISE AND COOPERATION BETWEEN THE SEXES* 102 (2007).

92. *See Primate Declines*, *supra* note 32 (explaining how monkeys keep forests healthy by spreading and fertilizing seeds, among other things).

internally or externally. If demand is allowed to continue unabated, however, the long-term economic, environmental, and cultural costs could be devastating.

III. CURRENT EFFORTS: DOMESTIC AND INTERNATIONAL FRAMEWORKS

The CITES treaty is arguably the primary instrument used to attack the bushmeat hunting problem. The treaty's international framework, however, neglects the realities on the ground in each locality, and in the Congo Basin, the result has been that the treaty provisions are largely ineffective.

The CITES treaty was signed in 1973 in Washington, D.C.;⁹³ there are currently 175 parties to the treaty, including Congo, Congo-Brazzaville, Cameroon, and Gabon.⁹⁴ CITES heavily regulates the international trade of endangered species in an attempt to lessen the value of products made from endangered species by blocking access to international markets.⁹⁵ The text of CITES relies on governments as the best protectors of endangered species;⁹⁶ thus, domestic regulation takes place under the CITES framework.⁹⁷

Scholars have proclaimed that CITES is "one of the most comprehensive and successful international environmental treaties in existence" because of its success in many contexts, including clamping down on the international ivory trade.⁹⁸ By stifling the international trade of products such as ivory between supply nations and overseas markets, it reduced the products' value and effectively decreased levels of hunting elephants for their tusks.⁹⁹

The treaty, however, does not address the main danger to animals in the Congo Basin region: the *internal* bushmeat trade. With its focus on international trade, CITES cannot curb the massive domestic trade, which falls completely out of its purview. Even if international trade in bushmeat were a major threat, CITES would still not be helpful because of the enforcement difficulties.

93. CITES, <http://www.cites.org/> (last visited Dec. 31, 2011) [hereinafter CITES website].

94. *Id.*

95. Kassenoff, *supra* note 83, at 365.

96. Saskia Young, Note & Comment, *Contemporary Issues on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate over Sustainable Use*, 14 *COLO. J. INT'L ENVTL. L. & POL'Y* 167, 173 (2003); CITES, *supra* note 10, pmbl.

97. CITES, *supra* note 10, pmbl.

98. Elisabeth M. McOmber, *Problems in Enforcement of the Convention on International Trade in Endangered Species*, 27 *BROOK. J. INT'L L.* 673, 674 (2002).

99. See Baglivo, *supra* note 50, at 279.

A. Cites Requirements for Member States

CITES was designed to be decentralized, leaving each party nation a substantial amount of leeway to determine how best to fulfill its treaty duties.¹⁰⁰ This approach is sensible because a solution that is effective and efficient in one context might be unworkable or inappropriate in another. Each party to the treaty, as a sovereign nation, must enact its own domestic legislation to prohibit international trade and “penalize trade in, or possession of, such specimens.”¹⁰¹ CITES does not provide any specifics about the penalties parties must impose, but instead allows party nations the flexibility to enact individualized solutions.

I. Trade Restrictions

CITES is less flexible when it comes to other parts of the administration of the treaty: party nations must create Scientific and Management Authorities to oversee the granting of export permits for wildlife products.¹⁰² The treaty divides species into three classifications based on threat of extinction.¹⁰³ Gorillas appear in the classification subject to the strictest regulation,¹⁰⁴ as one of several species whose threat of extinction is or may be affected by trade.¹⁰⁵ Trade in this classification is authorized only in “exceptional circumstances.”¹⁰⁶ The export of such a species requires the prior grant of an export permit,¹⁰⁷ and a signatory’s Scientific and Management Authority may grant one only when the export will not be detrimental to the survival of that species, the specimen was obtained under the laws of that state, will be shipped humanely, and an import permit has been granted.¹⁰⁸ Applicants for import permits must show that the trade was not for primarily commercial purposes.¹⁰⁹ Species classified as less threatened with extinction are subject to slightly fewer export restrictions.¹¹⁰ For those listed as

100. See Jonathan Liljeblad, *Finding Another Link in the Chain: International Treaties and Devolution to Local Law Enforcement in the Case of the Convention on the International Trade in Endangered Species*, 18 S. CAL. INTERDISC. L.J. 527, 531 (2009); see also Kunich, *supra* note 7, at 196–97 (explaining that CITES only vaguely requires parties to take “appropriate measures” to enact legislation enforcing the treaty).

101. CITES, *supra* note 10, art. VIII, § 1(a).

102. The Scientific and Management Authorities are administrative structures that enforce CITES that member nations must create to comply with the treaty. See CITES, *supra* note 10, art. IX, § 1(a).

103. *Id.* art. II (listing the classifications in Appendices I, II, and III, in descending order of urgency).

104. *Id.* app. I; CITES website, *supra* note 93.

105. CITES, *supra* note 10, art. II, § 1.

106. *Id.* art. II, § 1.

107. *Id.* art. III, § 2.

108. *Id.* art. III, § 2(a)–(d).

109. *Id.* art. III, § 3.

110. CITES, *supra* note 10, arts. IV–V.

less threatened, an exporter need not show the presence of an import permit,¹¹¹ and the trade purpose can be primarily commercial.

The treaty is very specific about allowing for the commercial sale of specimens bred in captivity; exporters may classify most-protected specimens as less protected if they are bred in captivity for commercial purposes.¹¹² Parties also may make reservations of “any species” listed when ratifying the treaty and thus exclude that species from their treaty obligations.¹¹³ A reservation allows those species to remain entirely free of regulation. For example, Saudi Arabia may specifically exclude Falconiformes (raptors and birds of prey bred and trained for hunting) from their treaty obligations and have no obligation to protect them under the treaty. The Scientific and Management Authority also is tasked with analyzing the environmental effects of the use of endangered species.¹¹⁴

B. CITES in the Congo Basin Region

The Democratic Republic of Congo, The Republic of Congo, Cameroon, and Gabon are signatories of CITES, and none has made any reservations to exclude bushmeat species from their obligations.¹¹⁵ Despite this effort, CITES protections have proved insufficient to protect endangered wildlife in the Congo Basin.

Scholars have argued that CITES’ decentralized nature is one reason the treaty has been unable to address the problems facing wildlife in the Congo Basin.¹¹⁶ Because CITES allows the parties to retain all authority and responsibility to enforce the treaty, enforcement relies entirely on the will and capacities of parties.¹¹⁷ The treaty places the economic and administrative burdens of enforcement on the range nations,¹¹⁸ where populations of endangered species live, feed, and need protection.¹¹⁹ Patrolling and protecting vast undeveloped areas, however, requires extensive administrative and financial resources, and range nations tend to be less developed and lack enforcement capacity due to poor organization and funding.¹²⁰ Civil wars exacerbate this

111. *Id.* art. IV, § 2.

112. *Id.* art. VII, § 4.

113. *Id.* art. XXIII, § 2.

114. *Id.*

115. CITES website, *supra* note 93.

116. *See* Kassenoff, *supra* note 83, at 372–73; Kohn & Eves, *supra* note 9, at 266–67; Young, *supra* note 96, at 174

117. Kassenoff, *supra* note 83, at 365–66; *see also* Kohn & Eves, *supra* note 9, at 266–67; McOmber, *supra* note 98, at 675.

118. CITES, *supra* note 10, art. III; Jay E. Carey, Note, *Improving the Efficacy of CITES by Providing the Proper Incentives to Protect Endangered Species*, 77 WASH. U. L. Q. 1291, 1298 (1999).

119. Young, *supra* note 96, at 183–84.

120. *See* Carey, *supra* note 118, at 1298.

problem because they lead to infrastructure breakdown and weak rule of law, especially in rural areas.¹²¹

There are two other key ways CITES fails the region: unworkable public management of lands and outlawing bushmeat hunting outright rather than managing the resource to meet both environmental and cultural needs.

1. The Problem of Public Management

Under their treaty obligations, Congo Basin region nations have taken control of wildlife areas in a form of public ownership.¹²² Public ownership is characterized by government ownership and control of wildlife resources held in trust for the people of the nation.¹²³ Public funds gained through taxation or through revenue from ecotourism¹²⁴ or hunting permits¹²⁵ support the management costs. An advantage public ownership has over other forms of regulation is that the government is well positioned to be mindful of future generations and act on their behalf.¹²⁶

This model has been used effectively in several contexts, including the United States¹²⁷ and Rwanda.¹²⁸ This system functions well in the United States because the parks are well funded and staffed through taxes, the sale of permits, and eco-tourism.¹²⁹ In this way, public management supports itself in the United

121. Polikoff, *supra* note 73, at 226.

122. HERBERT H.T. PRINS ET AL., *WILDLIFE CONSERVATION BY SUSTAINABLE USE* 249–50 (2000).

123. See Tommy L. Brown & Terry A. Messner, *Trends in Access and Wildlife Privatization*, in *WILDLIFE AND SOCIETY: THE SCIENCE OF HUMAN DIMENSIONS* 275, 281–82 (Michael J. Manfredo et al. eds., 2009).

124. Ecotourism is travel to fragile and usually protected areas that strives to be low impact for sightseeing and other activities, usually including wildlife photography and camping. The practice is generally lauded by ecologists for its ability to generate income from nature and wildlife with minimal negative impact on ecosystems. MARTHA HONEY, *ECOTOURISM AND SUSTAINABLE DEVELOPMENT: WHO OWNS PARADISE?* 32–33 (2d ed. 2008) (defining “ecotourism”); see, e.g., Greer Schott, *Year of the Gorilla: Using Ecotourism to Beat the Bushmeat Trade*, *NAT’L GEOGRAPHIC: ADVENTURE*, Sept. 24, 2009, <http://ngadventure.typepad.com/blog/2009/09/can-ecotourism-save-gorillas-from-becoming-bushmeat.html> (illustrating how revenue from ecotourism permits benefit endangered wildlife).

125. Michael Hutchins et al., *Fueling the Conservation Engine: Where Will the Money Come from to Drive Fish and Wildlife Management and Conservation?*, in *WILDLIFE AND SOCIETY: THE SCIENCE OF HUMAN DIMENSIONS* 184, 187 (Michael J. Manfredo et al. eds., 2009).

126. Bennett, *supra* note 18, at 291.

127. Hutchins et al., *supra* note 125, at 185.

128. Stephanie Pain, *The Gorilla’s Last Stand: We Can Halt the Gorilla’s Slide Towards Extinction, But Only by Taking Tough and Decisive Action Right Now*, *NEW SCIENTIST*, Jul. 25, 2009, at 34.

129. Hutchins et al., *supra* note 125, at 185.

States. Without the income derived from the wildlife resources themselves, a state would have to support the cost of public management through other means. Eco-tourism is often mentioned¹³⁰ as the best way for developing nations with a significant amount of wildlife resources to support state management costs because it allows people in surrounding communities to derive economic value from the wildlife resources without harming or threatening the animals. Tourism has been successful for conservation efforts in the United States because of its large middle class and its fondness for state and national parks, which generate a substantial amount of public income.¹³¹

Rwanda has had similar success with public management of lands. The pioneering Rwandan tourism program was started in 1979 by a pair of American conservationists alongside education programs about bushmeat as an effort to save the gorillas.¹³² This was highly effective until armed conflict and instability plunged the nation into chaos in the early 1990s.¹³³ After the conflict ended, the country stabilized, tourists began to return, and are now a source of income that allows the Rwandan government¹³⁴ to pay for its management costs. The country's well-developed infrastructure, current political stability, and rich and accessible wildlife resources have caused it to have a favorable reputation for eco-tourism among international eco-tourists.

The public ownership framework has not succeeded in the Congo Basin, however, because distinct regional conditions prevent effective enforcement of CITES.¹³⁵ The region appears to exhibit the recognized shortcomings of public ownership. Centralized government land management tends to fail to recognize the needs and desires (i.e., incentives) of local communities living in and around the forest habitats of wild game. This undermines community participation, impedes community buy-in, and thwarts regulatory effectiveness. Public ownership also has a predisposition toward ineffective enforcement because the logistics are cumbersome and expensive. As E.J. Milner-Gulland argues, effectively enforcing a public trust management system requires substantial resources from the government.¹³⁶ Because one body is supporting the costs of all protections and enforcement, the costs are concentrated and become too burdensome for poor nations. This is particularly problematic, Elbel Bennett points out, when the value of wildlife resources is high, as it is with bushmeat.¹³⁷

130. Schott, *supra* note 124.

131. Hutchins et al., *supra* note 125, at 187.

132. *Id.*

133. *Id.*

134. *Id.*

135. See generally GONDOLA, *supra* note 33.

136. E.J. Milner-Gulland, *Assessing Sustainability of Hunting: Insights from Bioeconomic Modeling*, in HUNTING AND BUSHMEAT UTILIZATION IN THE AFRICAN RAIN FOREST: PERSPECTIVES TOWARD A BLUEPRINT FOR CONSERVATION ACTION 113, 148 (Mohamed I Bakarr ed., 2001).

137. Bennett, *supra* note 18, at 291.

Guards' salaries, for instance, must be high enough to eliminate any need for illegal income, but this becomes prohibitive when poachers are willing to pay guards top dollar to look the other way. Close supervision could counter this tendency, but guards are often located far from the central government, making oversight impractical. Milner-Gulland also notes that rural bushmeat hunting grounds are frequently large and remote, with poor infrastructure and boundary control, so even well-intentioned guards may be ineffective.¹³⁸ Under this system, Congo Basin nations cannot afford the high costs of enforcement—the only incentive for hunters to refrain from harvesting wildlife.

To be effective, public ownership must pay for itself and not require extensive subsidizing poor countries cannot absorb. Eco-tourism and licensed hunting, as user-pay systems for wildlife usage, could become that source of income.¹³⁹ Eco-tourism advocates in the United States have tried to promote travel to the Congo Basin; *National Geographic Adventure* magazine recently pleaded for Americans to support conservation efforts by traveling to the Congo on eco-tourism vacations.¹⁴⁰ But many factors affect global tourism rates, so it is an inconsistent stream of revenue that cannot be relied on. Other factors make tourism a less than promising option for Congo Basin nations.¹⁴¹ There are few examples of communities in the Congo Basin benefiting economically from sport hunting and eco-tourism.¹⁴² Ongoing political conflict deters potential visitors, and forest gorillas, unlike the mountain gorillas in Rwanda, hide far from humans and are difficult to see.¹⁴³ In addition, in Rwanda, it is taboo to eat gorillas; the primates have never been hunted and are not scared of humans, while the gorillas in the forests of the Congo Basin have been hunted for generations.¹⁴⁴

Public ownership failure is not unique to the Congo Basin region; imposing regulation on natural resources has proved difficult in other locales where traditions are well established. Regulation of New England fisheries, for instance, resulted in inefficient practices, over-harvesting, and diminishing fish resources¹⁴⁵ when regional regulatory council composed of industry, state, and federal regulators, scientists, and environmentalists attempted to control when and where harvesters could fish, the size of their boats, and other details of the industry.¹⁴⁶

The current system of public ownership in the Congo Basin has been a systematic and applied failure. It is de facto unenforced due to regional conflict and the high costs of both internal and external enforcement. However, even if the system were enforceable as intended, it would probably not work because it does

138. Milner-Gulland, *supra* note 136, at 148.

139. Hutchins et al., *supra* note 125, at 187.

140. Schott, *supra* note 124.

141. Pain, *supra* note 128, at 34.

142. Kohn & Eves, *supra* note 9, at 257.

143. Pain, *supra* note 128, at 34.

144. *Id.*

145. See Aaron Pressman, *Fished Out*, *BUS. WK.*, Sept. 4, 2006, at 56.

146. *Id.*

nothing to disrupt the entrenched need for bushmeat as food and commodity, similar to the result of the public ownership framework imposed on the New England fisheries. The local dynamic of deeply ingrained traditions and robust demand coupled with impracticable enforcement mechanisms is not likely to change without substantial investment, which the region can ill afford.

2. The Failure to Exploit Sustainable Use

Another possible way to generate revenue is sanctioning and taxing sustainable-use programs. The CITES preamble states that the contracting nations have agreed to the conditions of the treaty, “conscious of the ever-growing value of wild fauna and flora from aesthetic, scientific, cultural, recreational and economic points of view.”¹⁴⁷ This explicit sanction of use for economic value reflects a perhaps counterintuitive understanding that CITES’s objective of protecting endangered species could be achieved through the commercial use of the same species that the treaty was designed to conserve.

Many less developed nations argue that they should be able to harness the economic value of their wildlife resources to support their conservation efforts by, for instance, breeding threatened animals.¹⁴⁸ CITES allows for this in certain circumstances, even for animals classified as most endangered.¹⁴⁹ Wildlife products from most-endangered animals, for instance, are less strictly regulated when the animals are bred in captivity for commercial purposes.¹⁵⁰ But the treaty does not go far enough.

Some scholars argue that increased commercial usage under the treaty would be a good compromise to defray some of the costs of enforcement for poorer nations and allow villagers in range communities to benefit from the wildlife resources.¹⁵¹ Saskia Young is among those who have pressed for a limited expansion of commercialization under the treaty, pointing out that the human cost of a complete ban on trade in wildlife products from endangered species is often overlooked.¹⁵² Because many hunters depend on bushmeat to feed their families,¹⁵³ depriving them of this protein source is a devastating result. Young is careful to admit that expansion of sustainable use allowed under CITES would have to be well defined to not swallow the treaty and invalidate its cautionary intent.¹⁵⁴ She proposes that member nations that want sustainable use programs

147. CITES, *supra* note 10, pmb1.

148. *See* Young, *supra* note 96, at 181–83.

149. CITES, *supra* note 10, art. VII, § 4.

150. *Id.*

151. Young, *supra* note 96, at 183.

152. *Id.*

153. Olupot et al., *supra* note 28, at 15.

154. Young, *supra* note 96, at 185.

should exchange that right for more stringent treaty obligations.¹⁵⁵ Jay E. Carey additionally argues that programs such as game ranching and captive breeding are valuable tools for conservation and underscores that revenue generated from such programs should go to support conservation.

Even the United Nations Food and Agriculture Program (FAO) supports sustainable use of wildlife resources because a complete denial of access to bushmeat has dire consequences for local communities. The FAO advocates for a system that would enable an area's protection yet also contribute to development of food security.¹⁵⁶ The challenge is to use wildlife protection and protected area management as a means to meet the needs of rural African populations while ensuring the safety of Africa's biodiversity resources.¹⁵⁷

Expanding sustainable use does have its detractors, however. Kyle Ash and Elizabeth A. Moore argue that industrial commoditization of animal species under the treaty perverts its purpose, is the main culprit of environmental destruction, and is significantly responsible for freshwater depletion, obliteration of forests, loss of topsoil, air pollution, and the loss of biodiversity.¹⁵⁸ Ash and Moore's arguments do not stand up in the bushmeat context, however, because its commercial value flows not from international demand, but from the economic realities of poor communities in the Congo Basin. Moreover, as Carey points out,¹⁵⁹ economic value is specifically mentioned in the CITES preamble,¹⁶⁰ so commoditization cannot be a perversion of the treaty. The CITES drafters clearly recognized that the value of endangered species to people of party nations could not be ignored. Carey goes on to argue that the CITES prohibition on trade of endangered species products has not effectively reduced demand because so much of the demand comes from markets within the range nations.¹⁶¹ The products simply do not need to cross international boundaries to reach willing buyers.¹⁶²

Carey argues that any successful ban for a product must be accompanied by some mechanism that will lessen the demand for bushmeat.¹⁶³ One obvious idea: develop alternate food sources to decrease demand for bushmeat. One such

155. *Id.* at 189.

156. NTIAMOA-BAIDU, *supra* note 23, ¶ 5.2. ("What is needed, therefore, is the creation of the appropriate policy environment and the establishment of institutional and technical structures which allow people to manage and use wildlife resources in protected areas sustainably.")

157. *Id.*

158. Kyle Ash, *Why "Managing" Biodiversity Will Fail: An Alternative Approach to Sustainable Exploitation for International Law*, 13 ANIMAL L. 209, 220 (2007); Elizabeth A. Moore, Note, "I'll Take Two Endangered Species Please": *Is the Commercialization of Endangered Species a Valid Activity that Should be Permitted Under the Endangered Species Act to Enhance the Survival of the Species?*, 74 GEO. WASH. L. REV. 627, 645 (2007).

159. Carey, *supra* note 118, at 1298.

160. CITES, *supra* note 10, pmbl.

161. Carey, *supra* note 118, at 1298.

162. *Id.*

163. Carey, *supra* note 118, at 1307.

experiment backfired and instead caused a spike in ecological damage.¹⁶⁴ In 1995, a conservation program in Nigeria introduced protein and revenue alternatives, including livestock to start herds and jobs in a processing center.¹⁶⁵ The trouble began when the livestock proved so attractive that outsiders were attracted to villages participating in the program; village population spiked, and so did deforestation and wild harvesting.¹⁶⁶ In light of this outcome, conservation proponents realize they must be able to effectively exclude outsiders or risk nullifying any program benefits. Andrew Kohn and Heather Eves use this example to argue against combining development and conservation programs.¹⁶⁷ They contend that no single program can address both conservation of biodiversity and poverty because of the tension between the needs of this generation and the needs of future generations.¹⁶⁸

Programs that have been successful under CITES in other places have not worked to save wildlife, particularly gorillas, in the Congo Basin because they do not address existing economic conditions in the region. The treaty's focus on only international trade, its complete ban on hunting, and extremely limited sustainable use exceptions cannot accommodate specific local needs that drive demand for bushmeat. The problems unique to the region have not effectively been addressed by any of the international efforts to save the gorillas. As Ms. Goodall's comments foreshadowed, calls to address this threat have gotten progressively louder.

IV. THE TRAGEDY OF THE CONGOLESE COMMONS AND POTENTIAL HAPPY ENDINGS

Development and conservation can be aligned by making the long-term preservation of wildlife resource a rational economic choice for the local population. By allowing local villagers to claim property rights to the wildlife resources to which they have access, villagers would invest in preserving the existence and economic profitability of those resources. Such a system could be sustainable in the long term because it would be in sync with local actors' needs, support itself financially, and require less demanding support from the central government. Village hunters and consumers would be the principle stakeholders for a properly functioning system of this kind, but they would not be the only stakeholders. Regulation also must involve partnerships with national and local government as well as business enterprises.

164. See John F. Oates, *The Dangers of Conservation by Rural Development – A Case-Study from the Forests of Nigeria*, 29 *Oryx* 117 (Apr. 1995).

165. See *id.*

166. See *id.*

167. Kohn & Eves, *supra* note 9, at 254.

168. *Id.*

A. The Tragedy of the Commons

The bushmeat crisis in the Congo Basin is a prime example of a phenomenon that scholars refer to as the “Tragedy of the Commons.”¹⁶⁹ Garrett Hardin, in his famous article on economic theory on usage of common resources, explained that rational actors harvesting from open-access resources will have incentives to consume so much that they deplete and eventually extinguish that resource unless some restriction is placed on the resource.¹⁷⁰ So, according to Hardin’s logic, hunters in the Congo will want to harvest as much meat as possible as quickly as possible before neighbors can do the same and drive animals to extinction. Akin to the prisoner’s dilemma,¹⁷¹ all the hunter’s neighbors will be doing the same to maximize the resource’s benefit to themselves, which will only hasten decline and eventual extinction of wildlife resources in the forests in obvious detriment to the entire community.

Many scholars and observers have raised the possibility of a private property rights-based framework as a cure to the commons problem in wildlife conservation.¹⁷² As in any management system, there are administrative costs to consider.¹⁷³ These costs include monitoring and policing the usage of the property rights.¹⁷⁴ However, a private property rights system is better suited to support its own costs than a public ownership system because it more easily allows individuals to profit from the resource in a way that returns revenue to the government.

A system of individual hunting quotients, for instance, has been successful in Australian fisheries.¹⁷⁵ The Australian government instituted a system of transferable licenses to harvest a certain quota of lobster.¹⁷⁶ Lobster harvesters have waxed fat under this system, harvesting less, so their catch does not endanger the number of lobster in the wild, which allows the resource to develop more and increase in value.¹⁷⁷ The owners of the licenses pay administrative costs for the system, including paying scientists to monitor the lobster population in their waters.¹⁷⁸ This economic and ecological success is a sharp contrast to the centrally managed fisheries in New England.¹⁷⁹

169. See generally Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

170. Edella Schlager, *Common-Pool Resource Theory*, in ENVIRONMENTAL GOVERNANCE RECONSIDERED: CHALLENGES, CHOICES, AND OPPORTUNITIES 145, 149 (2004).

171. *Id.* at 149.

172. See, e.g., Brown & Messner, *supra* note 123, at 281–82.

173. See Carol Rose, *Rethinking Environmental Controls*, 1991 DUKE L.J. 1, 9–10 (1991).

174. *Id.* at 21–24.

175. John Tierney, *A Tale of Two Fisheries*, N.Y. TIMES, Aug. 27, 2000, § 6 (Magazine), at 38.

176. *Id.*

177. *Id.*

178. *Id.*

179. Pressman, *supra* note 145.

Scholars have even noted that such systems of property rights develop naturally in adaptive societies when the loss of value from over-harvesting the wildlife under an open-access scheme becomes so great that it outweighs the administrative costs necessary to maintain such a system.¹⁸⁰ Historically, communities have spontaneously invested in developing private property systems to ensure the continued presence of the resource that benefits the community.¹⁸¹ Terry Anderson and P.J. Hill describe ranchers in the early days of the American west.¹⁸² Cattlemen who moved west to the Great Plains had property rights over their herds, but no property rights over grazing land.¹⁸³ But as more cattlemen moved out to the Great Plains, and demand for the common resource of grazing land increased, so did the rental value of the same resource.¹⁸⁴ At a certain point, the value of this resource became so great that the cost of implementing a private property system was less than its benefit.¹⁸⁵ This created an incentive to organize such a system and invest resources into defining and enforcing exclusive rights over the land.¹⁸⁶ The system arose naturally, out of a community's self-interest and desire to preserve a common resource.

Similarly, Professor Harold Demsetz examined models for community management of resources, using the example of a village's management of fur-bearing animals in a nearby forest and concluded that a private property regulatory framework was the most effective method of conserving wildlife resources.¹⁸⁷ He uses "The Tragedy of the Commons" idea as a lens to analyze a forest community of rational actors in seventeenth century Quebec. They implemented a system of property rights for a wildlife resource, furs, when the benefits of internalizing the costs of private management outweighed the costs of maintaining such a structure.¹⁸⁸ Without such a system, curtailing hunting is not worth the lost economic potential; no rational actor will expend resources to increase or maintain wild animal populations.¹⁸⁹ That is to say, it was not worth the cost for any of the harvesters to promote the longevity of the source of furs through curtailed hunting or any other method because any benefit would be shared by the entire community while the cost would be borne solely by the individual. The personal investment

180. See Terry L. Anderson & P.J. Hill, *The Evolution of Property Rights, A Study of the American West*, 18 J.L. & Econ. 163, 165 (1975).

181. See generally *id.* at 168–76.

182. *Id.* at 168.

183. *Id.* at 170.

184. *Id.*

185. Anderson & Hill, *supra* note 180, at 170.

186. *Id.*

187. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 354 (1967).

188. *Id.* at 350.

189. *Id.* at 351.

is not worth the potential return because any benefit derived will be shared by all harvesters.¹⁹⁰

Demsetz's example showed how a system of individual property rights sprang up in a forest community to cure "The Tragedy of the Commons" problem.¹⁹¹ Before the arrival of the fur trade to the area, the Montagne tribe of Native Americans hunted in the forests near Quebec primarily for food and the relatively few furs required by the hunter's family.¹⁹² "Hunting could be practiced freely and was carried on without assessing its impact on other hunters."¹⁹³ However, by the beginning of the eighteenth century, the Montagnes had started allotting territories to different hunters who could expect that other hunters would not harvest within their allotment.¹⁹⁴ The cause for this change was the increased value in furs from trade and the increased levels of harvesting that followed.¹⁹⁵ Demsetz classified this as animal husbandry and argued that it arose in the community as a rational response to increased animal depletion caused by the emerging value of furs.¹⁹⁶ The forest animals being hunted had relatively small home ranges, which meant that "the costs of internalizing the effects of husbanding these animals [were] considerably reduced."¹⁹⁷ This low cost of privatization, "together with the higher commercial value of fur-bearing forest animals, made it productive to establish private hunting lands."¹⁹⁸

The many similarities between eighteenth-century fur harvesting near Quebec and present day harvesting of bushmeat from gorillas in the Congo Basin make for a good comparison. Initially, both wildlife resources were forest animals that existed free of any public control. Hunters could harvest freely, but their activity had a low impact because demand was limited to the low level present in local communities. In both the Congo Basin and the forests near Quebec, impact increased when demand from distant markets began to be felt in those communities and increased the value of the wildlife product.

Certain differences do exist, and the comparison is not exact. The present situation in the Congo Basin is distinguished by the range size of gorillas and the presence in forest communities of outsiders, both logging enterprises and commercial hunters. Despite these differences, the comparison with the practice of bushmeat hunting in the Congo Basin is highly illustrative of how an effective property rights system may work in the present context.

The development of a system of property rights is a natural reaction to economic conditions where its benefits are greater than its inevitable costs:

190. *Id.*

191. *Id.*

192. Demsetz, *supra* note 187, at 352.

193. *Id.* at 351.

194. *Id.*

195. *Id.* at 352.

196. *Id.*

197. Demsetz, *supra* note 187, at 353.

198. *Id.*

implementation and enforcement.¹⁹⁹ One of the chief reasons that a private property rights system would be effective in the Congo Basin is its approach to the problem of rising demand for bushmeat.²⁰⁰ Currently, bushmeat has a very high economic value,²⁰¹ which means that the loss of that resource comes at a high cost, likely outweighing the costs of implementing and administering this system. Because of wholly ineffective enforcement, bushmeat in the Congo Basin is essentially an open-access resource, available to all harvesters freely.²⁰² Carey argues that private ownership would incentivize conservation via market demand, instead of attempting to force conservation in ways that fight prevailing market forces.²⁰³ Private ownership would leverage market demand for bushmeat and bring this value into communities controlling the resources instead of allowing it to be taken by poachers from outside the area and siphoned away to urban areas. The theory is in line with Demsetz' illustrations of the natural evolution of a private property rights system.

If given property rights, local populations are more likely to make decisions that help ensure the long-term survival of wildlife by using resources in a sustainable manner.²⁰⁴ A property rights-based conservation structure also could support itself economically. A private ownership model could then achieve the conservation goals that have remained elusive in the Congo Basin.

Carey proposes that governments initiate property rights by issuing tradable hunting and breeding permits,²⁰⁵ also known as "individual transferable quotas"²⁰⁶—the system that proved effective in the context of Alaskan fisheries.²⁰⁷ Carey additionally argues that the trade ban should be lifted on wildlife products garnered through sustainable use programs.²⁰⁸

The Congo Basin might be particularly suited to property rights regulation of resources because such a scheme is more likely to work when certain environmental factors are present.²⁰⁹ According to Edella Schlager, the cooperative behavior that would ensure effective implementation of a property rights system comes from, among other things, community dependence on the resource, trust between harvesters, and experienced local leadership.²¹⁰ Villages

199. *Id.*

200. *See de Merode et al., supra* note 80, at 573 (explaining the importance of bushmeat to villagers).

201. *Id.*

202. *Cf. Rose, supra* note 173, at 9 (elucidating a theory of "do nothing" regulation of access to commons resources).

203. Carey, *supra* note 118, at 1306.

204. *Id.* at 1308.

205. *Id.* at 1320.

206. Pressman, *supra* note 145.

207. *Id.*

208. Carey, *supra* note 118, at 1317.

209. Schlager, *supra* note 170, at 152.

210. *Id.*

in the Congo Basin contain all these elements: they depend on the bushmeat,²¹¹ they are heavily steeped in traditional communal culture,²¹² and they are led by village chiefs or other local leaders.²¹³

This model's effectiveness lies in the way it harnesses the rational choices of actors to refrain from hunting to keep them from driving gorillas to extinction. The solution comes from the ground up because it is driven by incentives already present in market forces and not by disincentives (i.e., legal punishment imposed by external government forces).²¹⁴ Private ownership also allows for private actors to enforce their own rights, with the support of the government, by excluding other harvesters from the private actors' lands.

Finally, sustainable use of privately owned wildlife resources utilizes demand for bushmeat to give value to the resource and fund the system. Unlike a comprehensively enforced ban, which at best fights against demand or at worst ignores it, a sustainable use system should be implemented in such a way that the economic value of bushmeat harvesting is acknowledged and the practice is legalized and regulated in ways that are aligned with local actors' desires and needs. Sustainable use under a private property rights system also makes conservation plans support themselves economically using the economic value of the resource. Villagers' conservation actions will be supported by profit from wildlife they do harvest. This internalization of costs shifts the economic burden of enforcement off governments of poor nations.

Sustainable use programs under CITES would have the additional advantage of providing for the protein needs of the community. Current hunting practices, which play important cultural roles and also provide much needed food and income for villagers, could remain, although in an altered state. This would be easier to implement than a total shift in lifestyle because it does not require a massive shift in behavior. The change would merely come in reducing harvesting and adding husbandry actions, which would be determined by the property owners, not an external regulator. A property-rights system works to ensure the short- and long-term food security of villagers, while a comprehensively enforced ban would immediately create food shortages.

211. See de Merode et al., *supra* note 80.

212. FAO Regional Conference Report, *supra* note 17, ¶ 2.

213. See generally ERIC O. AYISI, AN INTRODUCTION TO THE STUDY OF AFRICAN CULTURE 55–63 (1997) (chieftainship as a form of government in some traditional African societies).

214. See generally Wai Fung Lam & Elinor Ostrom, *Analyzing the Dynamic Complexity of Development Interventions: Lessons from an Irrigation Experiment in Nepal*, 43 POL'Y SCI. 1, 14–17 (2010) (showing how effective community groups can be when organizing themselves, creating their own rules and augmenting the rules through collective enforcement).

1. Disadvantages to a Property Rights Framework

One potential challenge to adopting such a system is its novelty in the Congo Basin. The shift to a private property-based framework would be radical, which initially would make the adoption of such a system expensive. A number of issues may be difficult to sort out in the early stages, including the method of allocation and the exact nature of the property right.²¹⁵ The method of allocation can be especially divisive because it determines who may benefit from the resource. The exact property right given could be either a particular quota of animals harvested or the weight of animals harvested, among other options.²¹⁶ There also would be a need for education to ensure that populations fully understand the new system.

Another drawback to a private property system could be the loss of some of the intrinsic value of the wildlife resources.²¹⁷ Some scholars argue for the preservation of wildlife in the Congo Basin for its intrinsic value and maintain that any human interference diminishes this value.²¹⁸ The intrinsic value of wildlife such as gorillas is the moral and unquantifiable value of the animals' continued existence as a wild being. This almost mythic perception of the wild animal existing in its native habitat is nebulous and rests on shaky factual ground. The history of humans and animals on the planet is one of interaction and interdependence. Animals feed from human refuse heaps, travel on human paths, and compete for space and resources such as water and land. Even the wildest animals live in relation to human spheres of influence, not outside of them.

When considering the intrinsic value of wild animals, it is important to consider context and acknowledge the negative aspects of their existence. Many endangered animals are dangerous to humans and can cause injury or death, or destruction of property as they interact with the humans who frequently compete with them for territory and food. Even if the ideal expression of an animal's intrinsic value requires a state entirely free of human interference, sacrificing a bit of that ideal in order to ensure the animal's existence appears to be more sensible than allowing the value to disappear entirely with the species' inexorable extinction.

Other costs to the state include judicial and supervisory power to resolve disputes and oversee the scheme's implementation. A secondary supporting government role, such as the issuance of permits, better suits the capabilities of the cash-strapped governments of the Congo Basin.

Another potential roadblock to an effective system: the same lawlessness that serves as a barrier to the public ownership system. Instituting a property rights framework might simply replace one ineffectively enforced system with another. However, enforcement could be bolstered by collaborations with

215. See Rose, *supra* note 173, at 22.

216. *Id.*

217. See generally Pain, *supra* note 128 (describing gorillas as "iconic").

218. Ash, *supra* note 158, at 211.

resource-extracting businesses operating with government-granted concessions. With security teams and vehicles, these enterprises often have resources in remote communities that could be diverted to share the costs of policing a system and making sure that only owners harvest from their plots. The government could make private enterprises such as logging and mining operations bear some of the costs of policing a system as a term of their license agreements.²¹⁹ These companies have the human and technical resources to enforce such a system. The well-trained and well-equipped guards whom companies employ to protect their operations could succeed where national governments have failed, especially in cooperation with a willing community. When negotiating these concessions, national governments could insist on bonds to guarantee the condition of the environment in the communities in which they work. The bond would be returned to the companies only if they complied in good faith with community efforts to reduce hunting levels and supported locals with equipment or security services to help guard the forest against unauthorized hunters. This would build in incentives for logging companies to work with villagers to conserve resources and help implement an effective property-rights framework by imposing an extra cost on (usually multinational) businesses in those regions. Such a fee is reasonable because companies that extract resources are imposing costs on communities and ecosystems, and this bond would force them to internalize the costs.²²⁰

There are some tangible benefits for the businesses as well. Logging companies have a vested interest in effective enforcement because lower crime helps them by reducing theft of company property. Extraction companies also could strike agreements with the village property rights holders to supply meat to their operations.

Non-governmental organizations could act as mediators and watchdogs to ensure contracts are fair, which would, among other things, take administrative burdens off resource-strapped governments. This structure succeeded on at least one occasion in the Congo Basin.²²¹ A logging company made an agreement in northern Congo with the Congolese government, the Wildlife Conservation Society (an NGO), and local communities to manage wildlife and to control unsustainable hunting in the territory of its logging concession.²²² The agreement included the creation of hunting and non-hunting zones, bans on the long-distance transportation of protected wildlife, education programs, the development of alternative protein supplies, strict enforcement of the agreement, and intensive outside monitoring.²²³ The project's success was proved by "the presence of abundant populations of large mammals throughout the concession, including

219. See Wilkie & Carpenter, *supra* note 10, at 944–45 (arguing that private enterprise concessions are in the best position to enforce regulation because of their already present investment in guards and transportation infrastructure).

220. *Id.* at 946 (arguing that a bond is the best way to incentivize concessions to become active participants in conservation efforts).

221. Bennett, *supra* note 18, at 293.

222. *Id.*

223. *Id.*

gorillas, chimpanzees, and [other large mammals].”²²⁴ This program’s success shows that communal ownership and management is feasible in the conditions present in the Congo Basin.

This arrangement worked because it was aligned with the general principles that Demsetz elucidated and because it was specifically appropriate to the community in which it was forged. The program was tailored to conditions and needs of *that particular village*. Other villages could use that agreement as a guide but would be most successful if they tailored their agreements to meet their own needs and suit the capacities of the parties. Because of the wide variety of conditions present in the different areas of the Congo Basin, this flexibility is ideal for ensuring effectiveness in myriad local conditions.

A successful system should facilitate the bringing together of large companies with governments and local village rights holders to help enforce wildlife management systems. Companies are natural partners because they are already present in remote communities and have security enforcement resources that would be easy to expand with incentives such as bonding.

2. Sustainable Use Programs Under CITES Through Private Property Management

A private property framework also could set the stage for another major benefit: sustainable use programs. Sustainable use can provide the funds that would support the costs of the management system.²²⁵

Sustainable use programs under CITES could take a number of forms, aside from just harvesting at a sustainable rate. For example, free market environmentalist Terry Anderson, head of the Property and Environment Research Center, argues that the best way to preserve populations of endangered species is to engage in animal husbandry, or captive breeding, to produce herds that could supply the market for endangered species.²²⁶ Carey adds game ranching and tourism as sustainable uses.²²⁷ These are all options that would benefit the property owners without further endangering the animals.

These options do have their issues, though. Tourism, as discussed above, is not a viable option for the Congo Basin. Ranching and animal husbandry has been successful in other contexts; Ted Turner, for instance, is working on rebuilding plains buffalo populations with a gigantic game ranch.²²⁸ However,

224. *Id.*

225. Carey, *supra* note 118, at 1317.

226. See Dean Irvine, *Tiger Farms: A Conservation Idea Red in Tooth and Claw?*, CNN (Feb. 23, 2010), <http://edition.cnn.com/2010/WORLD/asiapcf/02/11/tiger.farms/?hpt=C1>.

227. Carey, *supra* note 118, at 1318–22.

228. TURNER ENTERPRISES, INC., <http://www.tedturner.com/ranches.asp> (last visited Dec. 31, 2011).

husbandry can be very difficult and is not viable for some animals.²²⁹ Because gorillas take fifteen years to reach adulthood, it would be extremely time consuming to raise them in a husbandry program.²³⁰

3. Individualized Versus Communal Property Rights

A property rights framework in the Congo Basin could be organized on either an individualized or communal basis. Given the dynamics in the region, the communal option may have the most potential for success.

Demsetz strongly prefers an individualized framework.²³¹ An individual property right is given with the consent of the community and an owner may act how she or he pleases with regard to the property in accordance with any limitations to the grant of the community.²³² Such a system can include a right of inheritance for the owner's heirs.²³³ In possession of this right, an owner may expect that no other member of the community will interfere with any actions taken.²³⁴ Demsetz argues that under such a system, an owner will maximize the present value of the resource with expectations of its future value.²³⁵

Under a communal property rights framework, all members of a community may exercise a right.²³⁶ This means that any member of a community may harvest bushmeat from the forest without being subject to external regulation. Demsetz believes that this is not an effective system for ensuring the continued survival of a wildlife resource because the individual hunter will benefit from harvesting, but the costs of exercising hunting rights are spread over the entire community of actors.²³⁷ Thus, a rational community member will maximize the individual value by over-hunting because she or he will receive the benefits but the costs are "borne by others."²³⁸ Demsetz does acknowledge that "it is conceivable that those who bear these rights, i.e. every member of the community, can agree to curtail the rate at which they [harvest] if negotiating and policing costs are zero."²³⁹ This agreement would take into account the interests of future generations, but Demsetz points out that such a negotiation would likely have great costs because it would have to have unanimous agreement to be effective; a

229. DIAMOND, *supra* note 31, at 169 (showing how rare it is for species to have the capacity to be successfully domesticated).

230. *Id.*

231. Demsetz, *supra* note 187, at 355.

232. *Id.* at 347.

233. *Id.* at 355.

234. *Id.* at 347.

235. *Id.* at 355.

236. Demsetz, *supra* note 187, at 354.

237. *Id.*

238. *Id.*

239. *Id.*

single “hold-out has the right to [harvest] as fast as [she] pleases.”²⁴⁰ Demsetz believes that an agreement would be difficult to reach because future benefits would not be brought to bear in the negotiations, and future generations would not have an agent acting on their behalf.²⁴¹

Demsetz does say this cost could be lessened if the state were to invest property rights to small groups, such as families, that would internalize all the costs and benefits of hunting or curtailing.²⁴² In that case, the effects of harvesting would be sufficiently internalized to cause a rational community to preserve the value of the resource for future generations. The rights could be invested in a corporation run by village elders and implemented through agreements with logging companies. African villages are very well suited to community ownership of resources because their culture is oriented toward collective social structures.²⁴³ Tribal leaders know all members of the community and can effectively allocate hunting rights to individuals within the village. Community leaders know everything that goes on in the village and can use this knowledge to exclude hunters who do not have hunting rights, including outsiders like commercial hunters. In their leadership capacity, they act as keepers of the tribe’s cultural history and can effectively speak for future generations to ensure that the resource continues to exist for the use of those generations. In addition, because of the collective nature of traditional culture, a communal system would dovetail with preexisting social norms and more easily gain the acceptance of community members, which would make the framework much easier to implement. Culture and tradition contribute to the unsustainable practice of bushmeat hunting; it is fitting that a regulatory framework suits those same norms. The inherent flexibility of a decentralized regulatory system would allow for cultural differences in various regions to manifest in different management structures. This is a definite strength for this type of management structure because it allows each system to be tailored to maximize efficiency for that region.

A communal structure also would streamline interactions with external actors such as NGOs, logging companies, and the national government. NGOs could more easily educate villagers on the long-term effects of bushmeat harvesting and on ways to maximize its sustainable use, a goal of many NGOs. As explained above, the actions of logging companies are significant players in bushmeat harvesting,²⁴⁴ and a communal body would easily allow for collective bargaining with these companies to extract cooperation and support in community management of wildlife.

An individualized system would have all the benefits extolled by Demsetz, but ultimately, a communal property rights system would be more

240. *Id.* at 354–55.

241. Demsetz, *supra* note 187, at 355.

242. *Id.* at 355–56.

243. See D.A. Masolo, *Western and African Communitarianism: A Comparison*, in *A COMPANION TO AFRICAN PHILOSOPHY* 483, 494 (Kwasi Wiredu et al. eds., 2004).

244. See GREENPEACE UK, *supra* note 65.

effective in the Congo Basin. Communal social norms prevalent in African culture would make such a system easier to implement, and the presence of NGOs to act as agents for future generations would cure many of the problems with such a system. Villagers would buy in more easily to a communal framework because of its cultural resonance. This buy-in is essential to the viability of a regulatory framework, especially one that is essentially self-executing due to self-interest.

A system of private ownership has distinct advantages over the failed public ownership system now in place in the Congo Basin. Such a system could benefit from enticing large companies operating in the region to contribute to costs by providing security. Costs could additionally be borne by exploiting sustainable use options. Communities eventually could devise practices that allow the benefits of hunting without endangering wildlife resources.

V. CONCLUSION

International observers are poorly positioned to design workable agreements that incentivize local actors to enforce local laws and preserve gorilla populations; local actors must be given the authority to work out those agreements on their own, possibly with the help of NGOs as arbiters and observers.

A property rights framework would give villagers incentives to conserve wildlife resources and keep rates of harvesting at sustainable levels. In order to accomplish this, villagers should have the ability to develop sustainable use programs, so, as Jay Carey has asserted, CITES should be supplemented with a framework for sustainable use and amended to allow for the international trade of products resulting from sustainable use. Rather than stifling demand for endangered animals, CITES should attempt to harness and exploit it by promoting sustainable use exports. Such trade could be facilitated by removing the need for an export permit and requiring only a certification of sustainable use from the Scientific and Management authorities. This would make the sustainable use program even more effective because it would increase the value of bushmeat, make the future existence of wildlife resources even more valuable, and work to alleviate poverty in rural areas by bringing more money into communities and into the pockets of subsistence hunters. This capital could then be used to import other, cheaper sources of protein into the village or to be invested in wealth-producing activities such as livestock husbandry.

Another benefit would be revenue for the nations. It is obviously difficult to tax an illegal activity. By legalizing subsistence hunting and legitimizing the economic value of wildlife products, bushmeat would become a taxable resource and a potential source of income for national governments.

Additional benefits may flow from good management of natural resources. It may foster democracy by using economic benefits to spur civic

participation in community government.²⁴⁵ Locals provided with a direct economic stake in community wildlife resource use will likely have a greater incentive to participate in government and eventually to form a fully functioning national democratic process.²⁴⁶

The advantages of legalizing subsistence hunting for bushmeat are clear; it would benefit both humans and wildlife in dramatic fashion. CITES should be amended to encourage this practice, and Congo Basin nations should replace their public management systems of lands with communal private property schemes. In the long term, such changes would work to incentivize hunters to refrain from decimating threatened populations so that they have something to hunt—and celebrate—for centuries to come.



245. See generally Kohn & Eves, *supra* note 9, at 252–53 (discussing the need for transparent government and fair distribution of resources to the successful conservation of wildlife).

246. *Id.*