

NGOs FOR THE CONSERVATION OF AFRICA'S WILDLIFE AND THEIR HABITATS

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Summary

Sustainability of Africa's unique wildlife and their habitats is threatened mainly by progressive loss of habitat due to growing demand for agricultural land, poaching to supply apparently insatiable international demand for rhino horns, elephant tusks, etc., and the tradition of consuming bush-meat which still endures in some parts of that continent.

In response, today there are many non-governmental organizations (NGOs) dedicated to the protection and conservation of Africa's wildlife and their habitats. Three of the major NGOs are described in this Article, and their mission, objectives, structure, projects and activities discussed in some detail.

By all accounts education is very important to both environmental protection and wildlife conservation. However, it is not clear as to what is, or ought to be, the goal of education in the particular context of conserving Africa's wildlife and their habitats? Should it be to maintain and reinforce the *status quo*, or should it be to innovate and create more effective management paradigms that seek the consent of the affected local communities and motivate them to participate in wildlife conservation as important stakeholders? And what moral values should children be educated to imbibe that would make them champion wildlife conservation in adulthood? These issues are also discussed along with some other germane issues.

1. Introduction

1.1. Historical Background

Historically, wild animals have been used and abused in different ways to entertain human beings, and the practice still continues in the form of circus, zoo, wildlife safari, etc. For example, in the ancient Roman Empire where entertainment was essential to the daily life of the citizenry, wild animal games, called *venationes*, were very popular. In such organized “games”, usually held in a circus arena, amphitheatre or a coliseum, men on foot and sometimes on horseback, called *bestiarii*, fought exotic and wild animals. The Imperial Games, usually held at the Roman Coliseum to entertain the Emperor, the Noblemen, Aristocrats, and their courtesans were altogether grander events with matching brutality and depravity, especially during the reigns of Caligula and Nero. Often they featured gladiators fighting ferocious wild animals to the death of either, not to mention the spectacles of Christians and others (mainly criminals, prisoners of war, and trained and paid fighters) being disemboweled and their entrails devoured by wild animals for the euphoric delectation of Emperors and common people alike. Growing popularity of such games created a huge demand for exotic and wild animals mainly from Africa and Asia.

“The other kind of evil comes, so to speak, in the form of a huge parade. Surrounding it is a retinue of swords and fire and chains and a mob of beasts to be let loose upon the disembowelled entrails of men.....”

Seneca , “On the Reasons for Withdrawing from the World”
Epistle 14 in *Epistolae Morales ad Lucilium*.

However, as the popularity of such games began to wane, possibly because people discovered that it was more fun enslaving, killing, maiming, raping and pillaging their own kind in organized “games” called battles and wars, or just acts of gratuitous violence and vandalism, increasingly the amphitheatres and especially the circuses resorted to inventing less gory games such as those in which wild and exotic animals were required to perform entertaining feats on command. This tradition still continues in modern circuses. Shooting of wild animals (not for food) is another form of “entertainment” which many consider cruel, barbaric and probably sadistic too. In the bygone days of the *British Raj*, for example, it was considered an indicator of high social status as well as proof of manly prowess for British and Indian Aristocrats to go on “tiger shoot” that involved shooting tigers and taking photographs for posterity showing the hunters(s) posing triumphantly over the dead animal(s). All kinds of wild animals had been hunted in this way in Africa, Asia and elsewhere. The practice still endures; for example, in the form of organized and ritualized killing of foxes with hounds which is a popular pastime in the English countryside even today.

Fortunately for the wildlife of Africa and elsewhere, human attitude to wildlife today is much more enlightened and increasingly so. This enlightened paradigm is disdainful even of the traditional zoo in which all kinds of animals are kept in captivity for the erudition and entertainment of humans. Instead, entertainment in the new paradigm involves people going on safari holidays to watch wild animals roam freely in their

natural habitats. And so the emphasis today is increasingly on how best to conserve wildlife and their natural habitats for the benefit of future generations.

1.2. Some of the Problems of African Wildlife Conservation

The vast continent of Africa is abundantly blessed with an amazing variety of wildlife, and their unique habitat, that attracts tourists and wildlife enthusiasts in large numbers from far and wide. Unfortunately, in common with wildlife in other parts of the world, Africa's unique wildlife is facing an uncertain future. According to the 2004 IUCN *Red List*, 15,589 species face extinction world-wide, of which many are natives of Africa. The following are of particular concern in the context of African wildlife and their habitats:

- (a) *Progressive loss of wildlife habitat:* With rising human population, human habitat has been progressively encroaching on wildlife habitats with adverse consequences for wildlife. The dynamic of the human-elephant interface illustrates the problem well. Elephants need to consume large quantities of food every day and increasingly they have been competing with humans for food, water and space. The problem is exacerbated by increasing demand for and expansion of agricultural lands resulting in dwindling habitat for elephants. In the main this is responsible for human-elephant conflicts which usually stem from elephants raiding agricultural crops for food (Barnes, 1996; Tchamba, 1996). Resolution of this conflict is far from easy, however, and calls for difficult management decisions to determine optimal ways for human beings to co-exist in harmony with elephants, or at least to avoid mutually harmful conflicts.
- (b) *Poaching:* Despite the CITES Convention (see glossary), illegal slaughter of elephants, rhinos and other animals continues, although largely due to the enforcement of the Convention, elephant populations have substantially increased in Botswana and Zimbabwe and thereby brought rewards for local people (Getz *et al.*, 1999). Adult elephants are killed for the ivory of their tusks which has a large and thriving market in South East Asian countries, mainly China. Historically, elephants had been the object of big game hunting; ivory from their tusks used in jewellery, ornaments, piano keys, and in *hanko* which is a signature seal required in official documents in Japan; and elephant meat consumed by local people. Due to cultural reasons and to satisfy the growing demand of Western tourists for jewellery and souvenirs made of ivory, there is still a large and growing demand for ivory in those countries which the CITES provisions (Appendices II and III) cannot satisfy. Hence the continuing illegal slaughter of elephants (www.hsus.org/wildlife/issues_facing_wildlife).

In traditional Chinese medicine rhino horn is used to treat a range of ailments including fever, delirium, high blood pressure and loss of sexual potency, while in the country of Yemen rhino horns are carved into ceremonial dagger handles, called *jambiyas* in Arabic, that are a must-have fashion accessory for those seeking high or higher social status. Today there are laws and international conventions to protect the rhino, CITES in particular. However, before the coming into force of these laws and conventions, so

great had the impact of poaching been that since 1970 the population of African black rhino declined by a massive 95 percent to only around 2,500 individuals. Thanks to the enforcement of laws and regulations, black rhino population has now stabilized in some of the countries of Africa, although the north-western black rhino subspecies of the Cameroon still remains critically endangered with only 8 individuals alive today.

There is still high demand for rhino horn and, because supply through poaching has now been substantially curbed by enforcing laws and conventions, it is commanding a high price in the black market — it is not uncommon for a kilogram of rhino horn to change hands for 7,500 US dollars or more. And it is this that tempts poachers (usually poor Africans, working for criminal gangs, for whom the reward is enormous) to take the risk of even being killed for illegally hunting rhinos for their horn.

- (c) *Bush-meat consumption:* People in some parts of Africa have growing and apparently insatiable appetite for bush-meat, defined as meat of illegally hunted wild animals including man's closest relatives such as gorillas and chimpanzees. The consumption of bush-meat has been adversely affecting many of Africa's wild animals and indeed pushing them to the brink of extinction. Bush-meat consumption, which has its cultural roots in Africa, is not confined to the tropical forest belt of that continent. It is Africa-wide in scope, and increasingly international too because of migration of African people to Europe, North America and other parts of the world. Yet, unlike the high-profile issues of wildlife conservation, this continuing slaughter of wild animals, and its serious implications for Africa's wildlife conservation, is not reported in the media with the urgency it deserves .

Historically, hunting of wild animals for food had been an important element of hunting and gathering in Africa as in other parts of the world. However, as the population size then was much smaller than today's, and because people hunted mainly if not exclusively to feed their families or family groups, hunting then was sustainable because the number and variety of animals hunted had been well within nature's capacity to replenish through reproduction. By contrast, today the practice of bush-meat consumption is highly unsustainable (and to many barbaric too) because the population size to be catered for is much larger, and people seldom hunt to feed their families. They frequently do so to make profit by selling wild animals to criminal gangs and organizations that are major players in the growing and lucrative but illegal bush-meat market. Western logging companies have been exacerbating the problem by building roads into deep forests that had hitherto been inaccessible to hunters, and by so doing they have also been contributing to the progressive removal of wildlife habitats. It is a matter of deep concern that today in many parts of Africa clever and often not so covert marketing has been creating the popular perception that it is chic and gourmet-like to consume bush-meat, the subtext being that it is to be regarded and consumed as delicacy and not merely as a traditional source of protein as it once was.

“The slaughter of chimpanzees and gorillas, our closest relatives, is absolutely diabolical. I cannot imagine that this can go on much longer before these animals are extinct”.

Richard Leaky, Anthropologist and Director of
Kenya Wildlife Service from 1989 to 1994 (CNN, 2005)

1.3. Some of the Reasons for Hope and Optimism

With growing awareness of the need for sustainable management of wildlife, government agencies of many of the African countries have been playing an increasingly important role in wildlife protection and conservation. The Kenya Wildlife Service (KWS), which is one of the best in Africa, provides a typical example. With its mission is “to work with others to sustainably conserve, protect and manage Kenya’s invaluable bio-diversity for the benefit of the people of Kenya and as a world heritage”, the conservation programs and services of the KWS include “conservation and management of wildlife resources outside protected areas in collaboration with the stakeholders, providing security and veterinary services”. The KWS also operates national education centers at Nairobi, Nakuru, Tsavo East and Tsavo West to educate the public about wildlife and environmental conservation in the context of Kenya, and to increase peoples’ understanding and appreciation of wildlife, their value, and why it is important to conserve them for future generations (www.kws.org/conservation.html).

A significant role in wildlife conservation is also being played by the captive breeding programs of many of the zoos and safari parks mainly in the Western world. For example, at the Berlin zoo in Germany, for the first time a black rhino calf was born to an artificially-inseminated southern black rhino cow belonging to a critically endangered sub-species of which only 32 individuals are believed to be alive today (www.afrol.com/articles/14445). The *Longleat Safari Park* in the United Kingdom has a successful and active animal breeding program (www.longleat.co.uk). The objective is to rehabilitate most of the animals bred in captivity to a free range environment in their natural habitat. As a typical example, in late 2002 a female black rhino from the Frankfurt zoo, Germany, and a male black rhino from the White Oak Conservation Centre in the USA were both moved to a 1200 ha enclosure close to the *Marakele National Park* in South Africa. This move was successful. They got on well and, for the first time ever, in August 2003 they produced a female calf (www.rhinos-irf.org/news/african/). Many of the zoos and safari parks also run educational programs focusing on children (in the age range of 3 to 14 years at *Longleat*) that entertain them and at the same time subliminally convey to them the importance of wildlife conservation.

The pioneering work of the David Sheldrick Wildlife Trust into the rearing of orphaned baby elephants and releasing them to the wild when they become adults is also to be applauded (www.bbc.co.uk/nature/animals/conservation/elephants). The Trust continues to rescue and rehabilitate elephants and rhinos and campaigns to halt the ivory trade and the shipping of live elephants to zoos and circuses. The love, not to mention total dedication and commitment, of those who rear these orphans is truly remarkable and exemplary.

1.4. The Purpose of This Chapter

With regard to what is said above, the purpose of this chapter is to describe some of the major NGOs devoted to the conservation of Africa’s wildlife and their habitats and to discuss their structures, projects and activities. As education plays a very important role in both environmental protection and wildlife conservation, what is or ought to be the

goal of such education is also discussed.

2. Some of the Major NGOs for the Conservation of Africa's Wildlife and their Habitats.

Today there are a number of major NGOs devoted to conserving Africa's unique wildlife and their habitats for posterity. In what follows we will describe three of these NGOs and discuss their mission, structure, projects and activities in some detail.

2.1. The African Wildlife Foundation (www.awf.org)

2.1.1. Mission and Strategy

The stated mission of the African Wildlife Foundation (AWF) is to work together with the people of Africa to ensure that both the wildlife and wild lands of that continent will endure for ever. The following encapsulates AWF's strategy for fulfilling its mission:

“We have always believed that if conservation is to succeed, it is absolutely imperative that we move beyond the “either/or” equation that pits human development against wildlife conservation, and create a “both/and” scenario. We must create the ways and means for wildlife conservation to truly advance all of Africa.”

Leila S. Green, Chair Board of Trustees, AWF

2.1.2 Brief History

For over forty years now the programs and activities of the AWF have been exclusively concerned with the protection and conservation of some of Africa's rarest and treasured species such as the elephant, rhinoceros, cheetah, and the mountain gorilla. To that end over the years the AWF has successfully invested training and resources in African individuals and institutions, and conducted scientific study and research that has significantly contributed to greater understanding of Africa's extraordinary wildlife and ecosystems. Also, by pioneering community conservation the AWF has demonstrated how Africa's wildlife can be conserved while at the same time improving people's well being. In addition, the AWF has been providing much-needed advice and assistance to national parks and reserves in Africa by successfully promoting international cooperation to protect important trans-boundary wildlife habitats.

2.1.3. Programs

In fulfilling its mission, the AWF has been pursuing a number of programs, notably the following:

(a) The African Heartlands Programme

Established in 1998, the African Heartlands Programme seeks to conserve what remains of Africa's vital ecosystems. Heartlands are defined as “large, cohesive conservation

landscapes which are biologically important and have the scope to maintain healthy populations of wild species and natural processes well into future. They also form a sizeable economic unit in which tourism or other natural resource-based activities can contribute significantly to the livelihoods of people living in the area". By far the majority of the Heartlands are combination of lands owned by more than one of the following: the government, the community, individuals, and the private sector. Based on the results of extensive research and feasibility studies conducted by the AWF, to date eight African Heartlands have been identified, five of which straddle national boundaries: the Democratic Republic of Congo; Kazungula (Zambia, Zimbabwe, Botswana and Namibia); Kilimanjaro (Kenya and Tanzania); Limpopo (Mozambique, South Africa and Zimbabwe); Maasai Steppe (Tanzania); Samburu (Kenya); Virunga (Uganda, Rwanda and the Democratic Republic of Congo); and Zambezi (Zimbabwe, Zambia and Mozambique). In all cases the AWF works on concrete activities and projects in close collaboration with local partners seeking to protect more land for conservation while mitigating threats to these valuable resources. Also, in all cases the objective is to protect and conserve wildlife and their habitats, while at the same time seeking to develop economic activities within the Heartlands to benefit the local communities.

(b) Education and training

From its inception, the AWF took the view that Africans themselves are the ideal stewards of that continent's unique wildlife and natural resources. Accordingly, it has been investing in training Africans to take on the role of leaders and managers in its conservation programs. To this end the AWF established the first African Wildlife Management School in Tanzania in 1961, and has been providing scholarships to educate hundreds of Africans in conservation studies. Consequently today more than 80 percent of AWF's staff are African professionals. In the past the AWF has also helped to establish and support wildlife clubs in a number of African countries. Focused on young Africans, the objective of these clubs is to generate interest in, and raise the awareness of, wildlife conservation and its socio-economic importance.

(c) Research

From the outset the AWF has been acutely aware of the need for continuing research to identify effective ways and means with which to fulfill its mission. In the past it has supported some of the most respected and important research projects on African wildlife and their habitats, including those of Dian Fossey, Jane Goodall and Cynthia Moss (see glossary). It continues to support research projects that address pressing issues and problems of conservation management and human-wildlife conflicts that fall into four main categories: conservation of elephants in many of the savannah Heartlands; the International Gorilla Conservation Programme (IGCP); rhino conservation in Kenya, Namibia, South Africa and Tanzania; and protection of endangered predators such as cheetah, the African hunting dog and the Ethiopian wolf.

(d) Conservation enterprise

Conservation-related enterprises in Africa, such as ecotourism, wildlife safari,

production of honey and other economic goods from protected forests, and sale of local handicrafts to tourists, generate revenue streams that benefit rural communities living near wildlife habitats. As a result their perception of both wild animals and their habitats changes radically — from one of costly nuisance to that of economic assets to be nurtured, protected and sustained. Recognizing this, over the years the AWF has established a network of strategically located Conservation Centers throughout Africa that are staffed by specialist professionals who offer advice and expertise in business planning; production, marketing and export of bush products and handicrafts; and in law and community development to promote conservation enterprise in Africa.

2.1.4. Publications

The AWF publishes a newsletter, the *African Wildlife News*, as well as occasional books and papers to keep its members, corporate sponsors and others informed on its programs, activities and developments. The Newsletter can be downloaded from the net in the PDF format. Whenever possible, the books and papers are also made available on the net in the PDF format. *Studying Elephants* and “Gastrointestinal Parasites in Free-Ranging Kenyan Baboons” are AWF’s typical book and paper publication, respectively.

2.1.5. Organization and Management

Headed by a Board of Trustees, the management structure of the AWF is similar to that of a US non-profit organization independent of governments. The executive arm comprises a President, Vice Presidents, a Treasurer and other officials. AWF’s Headquarters are in Washington DC, USA, and it has Centers in Arusha (Tanzania), Kampala (Uganda), Nairobi (Kenya), White River (South Africa) and Zambezi (Zambia).

The AWF derives its revenue mainly from its members, including corporate members chosen for their respect for nature and the value they put on diversity, maintenance of highest ethical standards, and for the transparency of their business practices.

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Biographical Sketch

Professor Bhaskar Nath received his Bachelor's degree in Civil Engineering from the Indian Institute of Technology, Kharagpur, India, in 1960, followed by the Ph.D. degree from the University of Wales, UK, in 1964. In 1983 he was awarded the D.Sc. degree by the University of London for his outstanding original research (according to citation) in numerical mathematics. In 2001 he was awarded the Doctor Honoris Causa (Dr.H.C.) by the University of Chemical Technology and Metallurgy, Sofia, Bulgaria, for his contribution to environmental education.

After having taught at the University of London for more than 27 years, currently Professor Nath is Director of the European Centre for Pollution Research, London; Executive Director of International Centre for Technical Research, London; Editor of *Environment, Development and Sustainability* published by Springer; visiting professor to several European universities, and consultant to a number of international companies and organizations. Professor Nath's research interests include Numerical Mathematics, Elasto-Hydrodynamics, Philosophy, Environmental Economics, Sustainable Development, and Environmental Education. He has more than 100 scientific publications in these and related areas including 13 books.