

# KENYA PAST AND PRESENT

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**Commentary** Caring for the past has been a major preoccupation of the National Museums of Kenya. Not only is the past all-important in Archaeology and Palaeontology, but also in our conservation activities in Mombasa Old Town, Lamu and Gedi, and for the social history exhibit at Karen Blixen Museum.

As we look to the future, we must try and anticipate the shape, form and role that the National Museums will present. Increasingly the Museums' responsibility will be to change the priorities of its work force from collecting, preserving and presenting evidence of the past, to a greater concentration on the *reasons* for those activities.

It should be only by service to the public and the nation at large that we earn the support and recognition needed for our continued existence and future development. The

Museum no longer exists to serve the cultural, social and intellectual needs of a small elite. Instead the Museum has a dynamic educational function to fulfil. The world of science alone cannot do it.

The changing demographics and political and socio-economic realities of our time dictate that to continue to be successful in the new century – and possibly to survive at all – the Museum must tell a more complete story, one that is balanced, inclusive, and which reflects the decades-old diversity of our communities. As an educational institution devoted to the highest standard of scholarship and service to the public, this challenge speaks to the very foundation of the Museums' mission for the future.

**Dr Mohamed Isahakia**

# AFRICA'S RHINO HORN TRADE FROM 1970 TO 1985: AN ECONOMIC EXPLANATION

by Esmond Bradley Martin

In 1985 Bob Geldof, the Irish pop singer, effectively raised the consciousness of the western world about famine in Africa. By mid-1986 people had contributed over a hundred million dollars to help. Other misfortunes of the continent came to light in a startling fashion when Geldof went to Africa and found seas of bureaucracy, inept transport systems and outright corruption preventing food from reaching the starving. Mismanagement of Africa's natural and human resources — not lack of rain — was the main cause of a famine that stretched from West Africa to the Red Sea.

One potentially lucrative natural resource, Africa's wildlife, most definitely has been abused. If properly managed, it could produce a much larger quantity of meat, supply high-value exports and, sometimes, reap greater benefits from tourism.

Wildlife could have done this in the early 1960s when many countries in Africa became independent. Several new nations decided to expand the amount of land designated for wildlife parks and reserves, sometimes even doubling their size. It was argued that tourists would pay huge sums of money for the privilege of 'getting back to Nature'. The lodges and hotels needed to accommodate them would in turn create employment opportunities for local people. Because of these benefits, wildlife would be preserved. Both government planners and economists favoured the idea, yet few African countries are making large sums of money from tourism today. What has gone wrong?

## Unfortunate Exemplar

The rhinoceros well illustrates certain aspects of the mismanagement of wildlife in Africa. There is a lesson to be learned from the fate of Africa's rhinos, which can be applied to improving other problems on the continent.

Of the large mammals in the world, none has declined so rapidly as the black rhinoceros over the past two decades. In 1970, when the first scientific population estimate was made, there were approximately 65,000 in Africa. By 1980 there were about 14,785 animals remaining, while six years later only some 4,500 still survived — just seven per cent of the 1970 figure (see Tables I and II).

Tourists were frightened away from the outstanding national parks of Zaire, Ethiopia, Uganda, Angola and Mozambique by civil wars. These conflicts meant more and newer firearms became available both in those countries and their neighbours such as Chad, the Central African Republic (C.A.R.), Somalia, Sudan and Zambia.<sup>1</sup> The modern guns quickly fell into the hands of poachers and were far superior to those carried by patrols in wildlife parks. In skirmishes poachers could easily beat the field rangers who, besides being outclassed in weaponry, were often poorly paid and little motivated to risk their lives for the sake of an elephant or rhino. Breakdowns in law and order made it simpler for middlemen to smuggle out wildlife products. The declines in per capita income and the faltering economies of many of these African states made smuggling a yet more attractive business.<sup>2</sup>

## No Safety in Stability

By 1976, even rhinos in Kenya and northern Tanzania, where there was political stability, had come under threat. The slaughter of Kenya's rhinos has been described elsewhere: numbering 18,000 in 1968 and one of the largest populations anywhere, there are now probably less than 500.<sup>3</sup> In Uganda, during General Amin's time, 300 black and an almost equal number of white rhinos were killed,<sup>4</sup> leaving by the end of his reign of terror in 1979 no more than six rhinos alive.

One economic incentive for killing rhinos in Uganda was the government's policy of maintaining a grossly overvalued currency. In early 1980 the official exchange rate for the Uganda shilling was eight to one dollar, but the unofficial rate was ten times that. Anyone who got something of value out of the country for sale in hard currency stood to gain tremendously. Rhino horn is valuable. It fitted very neatly into smuggling schemes not only in Uganda but also in Zaire, Zambia and Tanzania, all of which had rhinos and an overvalued currency.

Artificially high currency values in African countries wreak havoc with their economies. They reduce incentives to farmers, stimulate wide-scale smuggling, provoke corruption among government bureaucrats, discourage local exports, make imports unrealistically cheap, and penalize local manufacturing. The costs of the practice are not known precisely, but Reginald Green estimated that the illegal economy of Uganda in the late 1970s amounted to

Table I. Estimated Numbers of Black Rhinos In Africa

Year	1970	1980	1984	1986
Approximate Number	65,000	14,785	8,800	4,500

Sources: Esmond and Chrysee Bradley Martin, "Horns of a Dilemma", *BBC Wildlife*, Vol 3, No 3 (March 1985), p 30; David Western and Lucy Vigne, "The Deteriorating Status of African Rhinos", *Oryx*, Vol XIX (October 1985), p 216; David Cumming, "Chairman's Report", *Pachyderm*, No 6 (February 1986), p 1; and letter from David Cumming to Simon Stuart, Species Programme Officer, IUCN, 13 June 1986.

over two-thirds of the Gross Domestic Product.<sup>5</sup> Janet MacGaffey, in an aptly titled article, "How to Survive and Become Rich Amidst Devastation: The Second Economy in Zaire", quoted a source stating that Zaire in 1977 lost over \$280 million in foreign exchange from the illegal export of coffee.<sup>6</sup>

Another widespread African government policy that encourages illicit trade is strict control of foreign exchange. In Kenya, this is not a new policy; it is one that dates from World War II British colonial rule, and affected the rhino then, as well. Ian Parker and I carried out a study on the export of Kenyan rhino horn from 1926 to 1976. Then the trade was legal, but to avoid either foreign exchange control or income tax, more horn was smuggled out than exported legitimately.<sup>7</sup>

By 1979 most of the rhinos from Kenya, northern Tanzania and Uganda were wiped out, so the less accessible but large populations in southern Tanzania, Zambia and the C.A.R. came under attack. In 1981 Markus Borner's survey of Tanzania's Selous Game Reserve estimated that there were 3,000 rhinos, the largest number then left in any single area of the world.<sup>8</sup> By 1987 there were probably fewer than 400 remaining.<sup>9</sup> Again, the poor performance of the country's economy and its greatly overvalued shilling encouraged the illegal trade. In 1985 the Tanzanian shilling's official rate was about 17 to the dollar; in the black-market a dollar was worth 130 shillings. Poachers were paid in Tanzanian shillings while the exporters received foreign exchange from buyers in North Yemen and banked much of it abroad. The heavily indebted Tanzanian government was robbed not only of scarce hard currency, but also of its wildlife.

#### Poorer Life For Man - And Beast

In Zambia, government statistics show that from 1976 to 1984 per capita national income, at 1970 prices, fell by 25%.<sup>10</sup> From 1975 to May 1986, the official value of the Zambian kwacha fell more than 90% — from equalling \$1.55 to just 14 cents. Traders in the country, many of whom were Zairois, Senegalese and Somali attracted there when copper prices were booming, increased their efforts to

smuggle out emeralds, amethysts, malachite, ivory and, of course, rhino horn.<sup>11</sup> Rhinos were very badly affected as a consequence of the economic slump: in the Luangwa Valley they declined from about 8,000 in 1974<sup>12</sup> to under 500 in 1985.<sup>13</sup>

Poaching in Zambia during the early 1980s was usually organized by traders, who also served as middlemen. They would lend a rifle and supply cartridges to a hunter. He, in turn, would hire one or two porters to carry maize-meal and salt down the Muchinga escarpment into the Luangwa Valley — and ivory and rhino horn on the way back. The hunter would plan to stay there for a week to ten days, moving camp frequently so as not to be an easy target for an anti-poaching team. The trader who had provided the ammunition would get the booty and pay about \$172 in kwacha for each kilo of rhino horn, about a third of the world market price.<sup>14</sup>

#### Less Easy Targets

By the end of 1984, most of the rhinos in Zambia had been shot. The still faltering economy of that country encouraged the poachers to venture across the Zambezi River into Zimbabwe. There they were much more at risk. Zimbabwe has the most efficient wildlife department in tropical Africa with well-trained, disciplined game scouts. Although even they were completely taken aback when gangs of Zambians invaded and killed at least 71 rhinos and 23 elephants in 1985.

In the Central African Republic there may have been as many as 3,000 black rhinos in 1981.<sup>15</sup> Then, poverty-stricken Sudanese and Chadian poachers moved in, the Chadians having already eliminated most of the rhinos in their own country. After only a year in the C.A.R., these foreigners had almost taken over poaching from the local people and had killed half the rhinos; two years later, only about 170 were left alive. Businessmen in northern C.A.R. bought most of the horn and arranged its transport by lorry to Khartoum and then by air to North Yemen, which had become the largest market in the world for rhino horn.<sup>16</sup>

Northern white rhinos also reached the brink of extinction because of poaching. In 1970 there were several thousand of them spread out in the Sudan, C.A.R., Uganda and Zaire; there were under fifty remaining by 1985, when the largest known population was 17 animals in northern Zaire's Garamba National Park.<sup>17</sup> As for southern white rhinos, they have not only survived, but dramatically increased in numbers in South Africa and Zimbabwe. They were reintroduced into Mozambique during Portuguese rule, but later strife there led to their disappearance again. Mozambique thus has the dubious distinction of being the only country that has had its white rhinos become extinct twice this century.<sup>18</sup>

Inefficient wildlife departments, unstable economies and civil wars make it easier and safer to hunt in Africa. Also, the hugely increased prices offered for rhino horn abroad provide a compelling incentive to kill rhinos. In the early 1970s, the wholesale price for rhino horn was only about \$34 a kilo; this more than tripled in 1976 to \$105 and rose again the next year to \$190, reaching \$300 in 1978 and \$500 in 1979.<sup>19</sup>

North Yemen has traditionally imported rhino horn to make into dagger handles. In the early 1970s, many Yemenis suddenly became far richer by working in Saudi Arabia and able to afford daggers with expensive handles.<sup>20</sup> Simultaneously, demand went up in eastern Asia for rhino horn to use as a medicine to reduce fever. The phenomenal economic growth in South Korea, Japan, Taiwan, Hong Kong, Macao, Malaysia and Singapore enabled ordinary people there to buy more horn despite its being one of the most expensive traditional medicines.

From 1972 to 1979 at least eight tonnes of rhino horn went onto the world market each year.<sup>21</sup> In the early 1980s, due to the reduced number of rhinos still alive, the annual figure fell to about three tonnes. About half went to North Yemen and the rest to eastern Asia.<sup>22</sup>

#### Poachers Make A Pretty Penny

Some conservationists believe middlemen grossly exploit and under-pay rhino poachers, but this is often not so. As already mentioned, poachers in Zambia make about a third of the world market price. In Kenya, according to a survey in 1983 of the Tsavo area, rhino poachers got the equivalent of \$370 per kilo or just under half the world market price. Indians and Arabs living in towns on the Kenya coast had to pay this high price for the horn as there was much competition for it.

It is impossible to say exactly how much smuggling has cost government treasuries in Africa,<sup>23</sup> but imports of rhino horn into eastern Asia from the 1970s to the mid-1980s were worth at least \$25 million. Between 1970 and 1979, when the trade was legal in many parts of Africa and Asia, African governments not only failed to protect their rhinos, but allowed smugglers to deprive them of at least \$6 million in revenue. After the trade bans were imposed, from 1980 to 1985 the smugglers continued their activities and, with the increasing value of horn, effectively robbed African countries of assets worth at least \$10 million.

More realistically, during the 1970s several nations could have benefitted from exporting other products from their animals. Rhino hide, nails, bones, blood, dried penises and intestines are all in great demand for medicines in Asia. Hide, for example, is used in South East Asia as a medicine to cure human skin problems.

Table II: Estimated Numbers of Black Rhinos By Country

Country	1980	1984	1986
Tanzania	3,795	3,130	500
Central African Republic	3,000	170	300
Zambia	2,750	1,650	400
Kenya	1,500	550	500
Zimbabwe	1,400	1,680	1,600
South Africa	630	640	600
Namibia	300	400	415
Sudan	300	100	?
Somalia	300	90	?
Angola	300	90	?
Mozambique	250	130	?
Cameroon	110	110	100
Malawi	40	20	20
Rwanda	30	15	15
Botswana	30	10	10
Chad	25	5	?
Ethiopia	20	10	?
Uganda	5	0	0

Sources: Kes Hillman, "African Rhino Action Plan", mimeographed for IUCN/NYZS African Rhino Survey, 4 July 1980; David Western and Lucy Vigne, "The Deteriorating State of African Rhinos", *Oryx*, Vol XIX (October 1985), p 216; David Cumming, "Chairman's Report", *Pachyderm*, No 6 (February 1986), p 1; and letter from David Cumming to Simon Stuart, Species Programme Officer, IUCN, 13 June 1986.

Only a couple of countries did sell hide. In South Africa in the late 1970s, a Chinese businessmen bought dried rhino hide for \$28 a kilo from ranchers who owned white rhinos. Considering that an adult white rhino can produce a hundred kilos of hide, this was well over the value for its horns. The trader exported the hide to Hong Kong from where most of it went to China, Macao, Singapore and Malaysia.<sup>24</sup> The Namibian government sold 260 kilos of rhino hide in 1982 for 1,873 rand, about \$1,680.<sup>25</sup> The buyer, a local company, exported it to a firm in South Africa. Less than \$7 a kilo was a ridiculously low price – an example of financial irresponsibility by Namibian officials.

There is no way of telling how much rhino hide was exported from South Africa in the 1970s,<sup>26</sup> but when its import became illegal in Hong Kong in early 1979, all traders had to register their stocks. They declared 2,000 kilos at a low wholesale value of \$50 a kilo.<sup>27</sup> At the time, pharmacists were selling it by the gram for the equivalent of \$423 a kilo.<sup>28</sup> I have no figures on the amount of rhino hide imported into other countries, but it was still available in several places in the mid-1980s. When I surveyed traditional medicine shops in late 1985 and early 1986, I found rhino

hide for sale in 65% of them in Taiwan's second biggest city, Kaohsiung, 39% in Hong Kong, 32% in Taipei and 30% in Macao; most of this hide was of African origin.

#### Sad Lack Of Salesmen

Wildlife department officials in tropical Africa were completely unaware of the value of rhino hide in the 1970s; so government employees never bothered to skin carcasses found in the bush. It was totally wasted, as was elephant hide from animals killed for crop raiding in eastern Africa. When processed properly, elephant hide could have earned Central Banks valuable hard currency; it is used to make cowboy boots, wallets, briefcases and many other items. From 1979 to 1981 the Zimbabwean government earned about \$120,000 exporting it.<sup>29</sup>

If African governments had sold all their rhino products during the 1970s, they might well have been encouraged to look after their rhino populations better. Instead, they allowed the animals to fall prey to poachers for merely the horns, which in turn has led to illicit sales abroad, loss of convertible currencies, the drastic decline in rhino numbers, and the high expense of trying to "save the rhino" today.

Now it is too late for African governments to benefit from exporting rhino commodities. Most African countries and almost all nations that are the main markets in Asia either belong to CITES, (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), or have domestic legislation that equally prohibits international trade.

#### Different Values

Today, the legitimate commercial value of rhinos in Africa must be considered in terms of their worth to tourism and perhaps sport hunting; and, luckily, in some countries they are very valuable for these reasons. In Kenya, the tourist industry in 1985 was the second largest contributor of foreign exchange and earned the country \$260 million.<sup>30</sup> Approximately half the 416,000 tourists who visited Kenya that year spent part of their time visiting national parks and reserves.<sup>31</sup> The rhino is one of the most sought after animals to see. It is ironic that not until rhinos became exceedingly rare did they particularly interest tourists.

Tourism is a most fickle industry, and relying on it as the sole reason to save rhinos is treading on slippery ground. Also, it costs a great deal and requires very good management to protect rhinos from poachers. Therefore, wanting to stop the rhino crisis, Kenya has established small, fenced rhino sanctuaries on privately owned land and within certain national parks. These are fully guarded, and have become breeding grounds for rhinos. Such sanctuaries are probably the best solution for rhino conservation in tropical Africa today. What a different story it could have been for the rhino had more African countries properly managed their economic affairs in the 1970s.

#### The Author

Dr Esmond Bradley Martin has been working for the World Wide Fund for Nature (WWF) since 1979. He specializes in studying the trade in wildlife products throughout the world.

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sus of elephants in the Luangwa Valley where he has been resident for many years.

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20. Martin, *The International Trade in Rhinoceros Products*, p 57.

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22. Esmond Bradley Martin, "The Decline in the Trade of Rhinoceros Horn", *Swara*, Vol 6, No 5 (September-October 1983), p 14; and Martin, "Rhinos and Daggers", p 198.

23. One of the last legal sales of current stocks of rhino horn in Africa was at Windhoek, Namibia, in 1983 when the government sold 99 kilos of rhino horn for 49,500 rand (about \$45,500, or \$460 per kilo), to a company in South Africa, which exported the horn to Taiwan (letter to the author from the Department of Agriculture and Nature Conservation, Directorate of Nature Conservation and Recreation Resorts, 7 May 1984).

24. Martin and Martin, *Run Rhino, Run*, pp 96-97.

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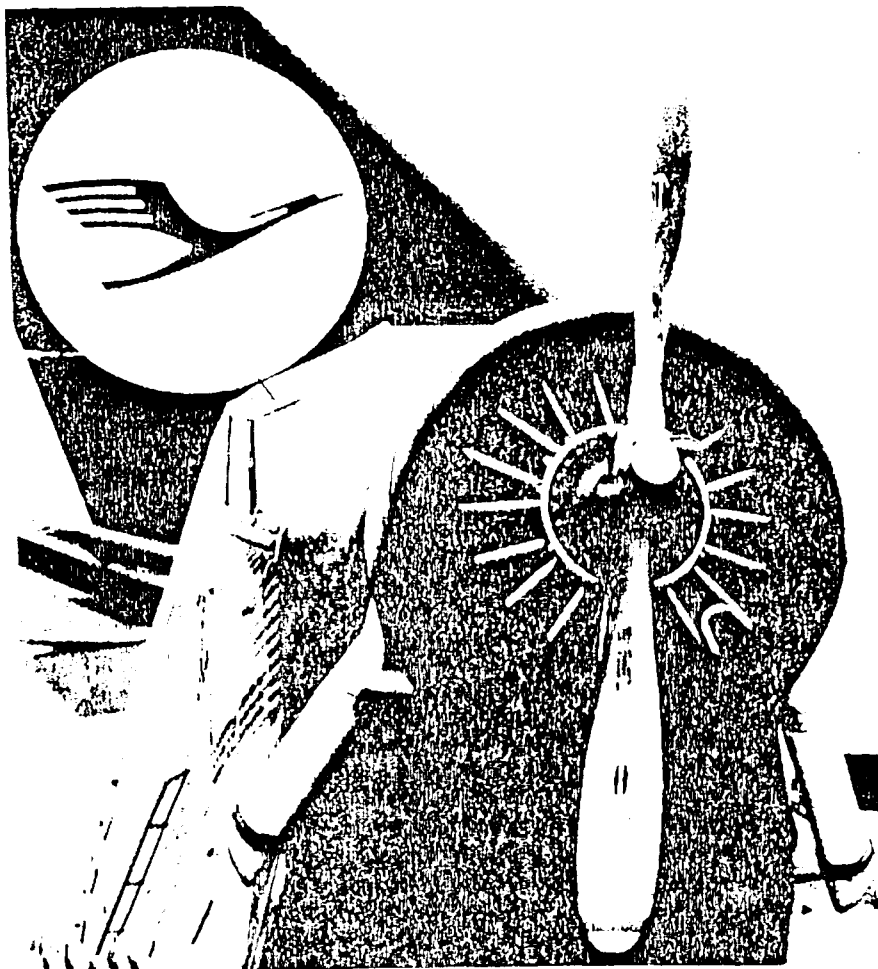
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the country. Now, however, traders from eastern Asia offer much more for African rhino horn (\$900 per pound) than can be obtained in Sanaa (less than \$700), so fewer people are willing to risk smuggling horn into Yemen.

But the carving industry itself has not shrunk. We counted 57 jambiyya workshops and 87 craftsmen,

against the will of God to cause the extinction of an animal species—in this case, the rhinoceros. He said immediately that he was willing to do this. Wide dissemination of such a fatwa could be an excellent way of reducing the demand for rhino horn.

With trade in rhino horn at a low ebb in Yemen, it is vital to try to stamp it out *now* in order to prevent its expansion when the economy picks up.