

COMMITTEE V
Problems of Third World Development:
The Case of Africa

DRAFT - 8/15/86
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THE ILLEGAL TRADE OF RHINOCEROS HORN IN AFRICA

by

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The Fifteenth International Conference on the Unity of the Sciences
Washington, D.C. November 27-30, 1986

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In 1985 the Irish entertainer, Bob Geldof, effectively raised the consciousness of the western world about famine in Africa, and by mid-1986 people had contributed over a hundred million dollars to try to remedy the situation. The ills of the continent came to light in a startling fashion when Geldof went to Africa, ran into seas of bureaucracy, inept transport systems and outright corruption inhibiting attempts to deliver food to the starving. A lot of fuss was made, and some academics now admit that the mismanagement of Africa's natural and human resources -- not the shortage of rainfall -- was the major cause of the widespread famine extending from West Africa to the Indian Ocean.

Thus, there is renewed interest in what has happened to Africa's forests, grasslands and rivers; much is being written on the pollution and destruction of various African habitats and the negative effects of a very high human population increase, for the purpose of trying to sort out the problems and to look for ways to improve matters.

However, one potentially lucrative natural resource, Africa's wildlife, has not received the attention it deserves in this context. If properly managed, it could produce much larger quantities of protein for the undernourished, supply products for export at high prices and, in some cases, reap greater benefits for tourism.

In fact, wildlife was in a position to do this in the early 1960s when many countries in Africa became politically independent and several leaders of the new nations decided to expand the amount of land under wildlife parks

and reserves, sometimes even doubling their size. It was argued that the tourists would pay huge sums of money for the privilege of "getting back to Nature", staying in lodges and hotels which would in turn create employment opportunities for local people; and, because of the benefits, the wildlife would be preserved. Both sentimentalists and economists favoured the idea. However, very few African countries are making large sums of money from tourism today. What has gone wrong?

Civil wars broke out in such countries as Zaire, Ethiopia, Uganda and Mozambique, where there were truly outstanding national parks, and the tourists naturally faded away. Moreover, stories are rife about illiterate soldiers carrying away typewriters from park headquarters, using antelope for target practice, herding cattle and growing maize in formerly inviolable wildlife sanctuaries. As for the commercialization of wildlife, that has often been left to poachers and middlemen.

The rhinoceros, in my opinion, well illustrates the mismanagement of wildlife in Africa. In this paper, I will show how it has been almost exterminated, describe poaching in relationship to various countries' economies, estimate the amount of money governments may have lost through illegal trade in its horn and note what is now being done in Kenya to rectify its status. There is a lesson to be learned from the fate of Africa's rhinos, which can be applied to improving many other problems on the continent.

Of all 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 estimate of its population was made, there were approximately 65,000

of these animals in Africa. By 1980 there were about 14,785 remaining, while six years later only 4,500 still survived -- just seven per cent of the 1970 figure (see Tables I and II).

When the civil wars arose in Africa, new and more modern firearms became available, particularly in Chad, the Central African Republic (C.A.R.), Ethiopia, Somalia, Uganda, Sudan, Zaire, Zambia, Mozambique and Angola.¹ They quickly fell into the hands of poachers and they were far superior to the guns carried by men on patrol in wildlife parks, so in skirmishes poachers could easily win from field rangers who, aside from being outclassed in weaponry, were often poorly paid and little motivated to risk their lives for the sake of an elephant or a rhino. In addition to the wars, law and order broke down, and it became simpler for middlemen to smuggle out of the countries wildlife products. They did this for their own financial gain, since African economies were declining, and per capita incomes were seriously falling in Angola, the C.A.R., Chad, Uganda, Mozambique, Zaire and Zambia.²

By 1976, even rhinos in Kenya and northern Tanzania, where there was political stability, had come under threat. The slaughter of Kenya's rhinos, which numbered about 18,000 in 1968 (one of the largest populations anywhere) and which are now thought to be less than 500, has been described elsewhere.³ The horns taken from these animals for sale abroad were smuggled out of the seaports and Nairobi airport.⁴ The status of rhinos became grimmer and grimmer in East Africa, and it would be hard to find a parallel to the disaster in Uganda where, during General Amin's time 300 black and an almost equal number of white rhinos were killed,⁵ leaving by the end of his reign of

terror in 1979 no more than six rhinos alive.

One of the economic incentives 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 obtained access to an exportable commodity and who smuggled it out of the country for hard currency stood to gain tremendously. Because rhino horn was available and in demand abroad, it fitted very neatly into smuggling schemes not only in Uganda but also in Zaire, Zambia and Tanzania, all of which had rhinos and which followed this same misguided policy.

There has been considerable contemporary literature on the artificially high values of African currencies, explaining how they wreak havoc in the economies. They reduce incentives to farmers, stimulate widescale smuggling, provoke corruption among government bureaucrats, discourage local exports, make imports unrealistically inexpensive, penalize local manufacturing and distort economies in entirety. There have been few studies, however, which have attempted to ascertain the value of commodities smuggled out of individual African countries in the past decade or so, although Reginald Green estimated that the illegal economy of Uganda in the late 1970s amounted to over two-thirds of the Gross Domestic Product,⁶ and 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.⁷

Another widespread African government policy which has encouraged illicit trade in rhinoceros horn is that of strictly controlling foreign exchange and, in some countries, even prohibiting individuals from legally obtaining any convertible currency for travel or use abroad. This is not a new policy; it is one that dates back to British colonial empire rule, and had consequences on the rhino then, too. Ian Parker and I carried out a study on the export of Kenya rhino horn from 1926 to 1976, when this trade could be legally carried on, but even so, we found that more was smuggled out than sent through legitimate channels,⁸ in order to circumvent foreign exchange control and, in some instances, to avoid income tax. With less confidence in the economies of most African countries today, it is no wonder that people want to externalize assets, and rhino horn can quickly be converted into hard currency in the markets where it is in demand.

By 1979 most of the rhinos from Kenya, northern Tanzania and Uganda had been wiped out, so poachers and middlemen began to concentrate their efforts on the more inaccessible but large populations in southern Tanzania, Zambia and the C.A.R. In 1981 Markus Borner carried out a survey of Tanzania's Selous Game Reserve and he estimated that there were still 3,000 rhinos, the largest number left in the world then.⁹ However, there are probably far fewer than a thousand remaining today.¹⁰ Again, the illegal trade was abetted by the poor performance of the country's economy and its greatly overvalued shilling. For example, in 1985 the official bank rate was about 17 shillings to the dollar, but businessmen in most of the cities would give up to 130 shillings for a dollar. The middlemen paid the poachers in Tanzanian

shillings, but the exporters in Tanzania usually received foreign exchange from buyers in North Yemen, and they banked their proceeds overseas, robbing the heavily indebted Tanzanian government of scarce hard currency as well as its own wildlife (in East Africa all wildlife belongs to the state, even when it resides on private land).

In Zambia, according to official government statistics, from 1976 to 1984, the per capita national income, at 1970 prices, fell by 25%.¹¹ From 1975 to May, 1986, the official value of the Zambian currency (kwacha) fell over 90% -- from equalling \$1.55 to just 14¢. Traders in Zambia (many of whom are Zairois, Senegalese and Somali, attracted to the country back at the time when copper prices were booming), increased their efforts to smuggle emeralds, amethysts, malachite, ivory and, of course, rhino horn out of the country.¹² Rhinos were, indeed, very hard hit as a consequence of the economic slump: in the Luangwa Valley they declined from approximately 8,000 in 1974¹³ to under 500 in 1985.¹⁴

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 who, in turn, would hire a porter or two to carry for him maizemeal 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 a week or ten days, moving camp from time to time so as not to be a sitting target for an anti-poaching team. Upon his return, he would hand over the trophies to the trader who had set him up and who would pay him about \$172 in kwacha for each kilo of rhino horn brought back, which was about a

third of the world market price.¹⁵

By the end of 1984, most of Zambia's rhinos had been shot out, but the economy was still faltering, and it was becoming increasingly difficult for people to make ends meet. Probably this is why hunters began to venture across the the Zambezi River, into Zimbabwe, to shoot rhinos. They were taking a much greater risk than when they confined their poaching to the Luangwa Valley; Zimbabwe has the finest wildlife department in Africa and well-trained, disciplined game scouts. The authorities were completely taken aback when gangs of Zambians invaded their country, killing at least 71 rhinos and 23 elephants in the Zambezi Valley during 1985. In January and February, 1986, a further six rhinos and another elephant were poached, but nine Zambian poachers were killed and four were arrested by Zimbabwean authorities.¹⁶

In the Central African Republic there may have been as many as 3,000 black rhinos in 1981.¹⁷ Then, Sudanese and Chadian poachers moved in. Chadians, like Zambians, had already eliminated most of the rhinos in their own country. After only a year in the C.A.R., the foreigners had practically taken over from local poachers and had managed to kill half the rhinos; two years later, only about 170 were left alive. It was businessmen in the northern part of the C.A.R. who bought most of the horn, and they arranged its transport by truck to Khartoum and from there by air to North Yemen which had become the largest market in the world for rhino horn.¹⁸

In this paper I have dealt with the trade in horn from black rhinos, but it should be noted that northern white rhinos have almost reached the brink of extinction because of poaching pressure. In 1970 there were several

thousand of them spread out in the Sudan, C.A.R., Uganda and Zaire; today there are under fifty remaining (see Table III), and the largest known population is that of seventeen in northern Zaire's Garamba National Park.¹⁹ As for southern white rhinos, they have not only survived, but dramatically increased, in South Africa and Zimbabwe. They were re-introduced to Mozambique before the Portuguese lost control there. Subsequent strife has led to their disappearance again, and Mozambique has the dubious distinction of being the country which has had white rhinos become extinct twice in this century.²⁰

While lack of efficiency in many African game departments, instability of various economies and civil wars are internal incentives for killing rhinos in Africa, the huge increases offered for rhino horn abroad have played an important role, also. In the early 1970s, the wholesale price for rhino horn was only about \$34 a kilo, which more than tripled to \$105 in 1976 and rose again the following year to \$190, reached \$300 in 1978 and then went up to \$500 a kilo in 1979.²¹

North Yemen, a small, traditional importer of rhino horn for making dagger handles, suddenly in the early 1970s became much wealthier due to the opening up of the country and the subsequent migration of workers to Saudi Arabia during the oil boom; more Yemenis were then able to buy daggers with attractive rhino horn handles, and the demand soared. Concurrently, the demand in eastern Asia for rhino horn as a medicine to reduce fever (it never has been used as an aphrodisiac except by a small minority in western Gujarat), went up, too. The phenomenal growth of the economies of such countries as South Korea, Japan, Taiwan, Hong Kong, Macao, Malaysia and Singapore enabled

middle class people there to buy more of it, despite its having become one of the most expensive traditional medicines.

From 1972 to 1979 an estimated eight tonnes of rhino horn were put onto the world market each year;²³ in the early 1980s, due to the decline in the number of rhinos still surviving in Africa, the quantity dropped considerably, to about three tonnes annually; about half of this went to North Yemen and the rest to eastern Asia.²⁴

Some conservationists believe that the illegal killers of rhinos are badly paid and that they are grossly exploited by middlemen. This is often not the case. As already mentioned, in Zambia poachers make about a third of the world market price. In Kenya, according to a survey carried out in and around the Tsavo area during 1983, hunters for rhinos were getting the equivalent of \$370 a kilo, which was more than half the world market price, even if you subtract the 20% difference between the official value of the Kenya shilling and its true value at the time. They received their money from Indians and Arabs living in towns along the Kenya coast, who had to pay a high price for the horn because there was much competition for it.

It is impossible to determine exactly how much hard currency government treasuries in Africa lost from the sales of rhino horn from the 1970s onwards.²⁵ However, there are two ways to make estimates of the horn value. One is by calculating the amount which has been imported into Asia on an annual basis since 1970 and multiplying that by the wholesale price. The other is to calculate the amount of horn from the total number of rhinos which have died since 1970 (estimating that perhaps half would have never

reached foreign markets because it wasn't found or it deteriorated or was stockpiled). Neither method can be said to be precise -- only a "guesstimate" -- but their totals for the amount of horn exported from Africa between 1970 and 1985 are about the same.

The wholesale value for the rhino horn which left Africa during that period (as calculated from the second method) is an estimated \$20,642,400, with over half in value (\$11,534,400) having been exported from 1980 to 1985. For this six-year period, over 90% would have had to have been illegal, and for the whole period something in excess of 75% would have been. Thus, African governments have lost over \$15 million in illegal exports of rhino horn since 1970.

In the 1970s, when trade in rhino products was still legal in many parts of Africa and Asia, several governments in Africa could have benefitted from exporting other parts of rhino anatomy, especially hide which was (and still is) in great demand in Southeast Asia as a medicine to cure human skin problems. However, in only two countries, South Africa and, to a much lesser extent, Namibia, did this happen. In South Africa a Chinese businessman in the late 1970s purchased rhino hide from ranchers who owned white rhinos. He paid about \$28 a kilo for it (dried). Considering that an adult white rhino can produce a hundred kilos of skin, this is well above the average value for the horns that the animal carries. The trader exported the hide to Hong Kong, from where some was sent on to China, Macao, Singapore and Malaysia.²⁶ The Namibian government sold 260 kilos of rhino hide in 1982 to a local company for 1,873 rand (about \$1,681),²⁷ which in turn exported it to a firm in South

Africa. At under \$7 a kilo, this was^a ridiculously low price and can only be seen as an example of financial irresponsibility on behalf of the Namibian government authorities.

There is no way of telling how much rhino hide was exported from South Africa in the 1970s,²⁸ but when the import of it became illegal in Hong Kong (early 1979), the Agriculture and Fisheries Department there requested all import/export traders to register their stocks. They declared 2,000 kilos at a low wholesale value of \$50 a kilo.²⁹ (While the pharmacists only sold a few grams at a time to a patient, their price was \$423 a kilo.³⁰) I have no figures on the amount of rhino hide imported into other Asian countries, although it is still available in many places. When I carried out a survey of traditional medicine shops during late 1985 and early 1986, I found that 65% in Kaohsiung (Taiwan's second largest city) had rhino hide for sale, 39% in Hong Kong, 32% in Taipei and 30% in Macao did. The hide available in these places was almost all of southern African origin.

In the 1970s, officials of the wildlife departments in tropical Africa were totally unaware of the value of rhino hide; consequently, when carcasses were found, government employees never removed it. It was totally wasted, as is elephant hide from the animals killed for crop raiding in eastern Africa. When processed properly, elephant hide can earn Central Banks valuable foreign exchange; it is used to make American cowboy boots, wallets, briefcases and many other items. From 1979 to 1981 the Zimbabwean government earned about \$120,000 exporting it.³¹

In the past, more money could have been earned from exporting rhino hide and nails than horn. These rhino products, as well as rhino bones, blood, dried penises and intestines are used for medicine in Asia and are in great demand. The money that could have been made from their sale might well have encouraged African governments to look after their rhino populations instead of allowing them to fall prey to poachers which in turn has led to illegal sales abroad, loss of convertible currencies, the consequent drastic decline in rhino numbers and the high expense of trying to "save the rhino" now.

Because of the rhino's endangered status today it is too late for African governments to benefit from the export of rhino commodities: most countries in Africa and almost all the main markets in Asia belong to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which prohibits international trade in such species.

Today, the legitimate commercial value of rhinos in Africa must be considered in terms of their worth to tourism; and, luckily, in some countries they are still very valuable from this viewpoint. In Kenya, the tourist industry in 1985 was the second largest contributor of foreign exchange, after coffee, and it earned the country \$260 million.³² Approximately half the 416,000 tourists who visited Kenya that year spent part of their time visiting national parks and reserves,³³ and the rhino was one of the most sought after animals. It is ironic, though, that not until rhinos became exceedingly rare did they particularly interest tourists.

In Africa tourism is one of the most fickle industries, and relying on it as a reason to save rhinos is treading on slippery ground. Moreover, it costs

tremendous sums and requires good management to protect rhinos from poaching. Understanding this, but wanting to halt the rhino crisis, Kenya is in the process of establishing small, fenced rhino sanctuaries within national parks. These sanctuaries are to be fully guarded, and it is hoped that they will also become breeding grounds for rhinos. At present, such sanctuaries are probably the only solution for rhino conservation in tropical Africa. What a different story it could have been for rhinos and people had more African countries properly managed their affairs in the 1970s.

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July 1986.

FOOTNOTES

1. Iain Douglas-Hamilton, "Elephants Hit by African Arms Race", African Elephant and Rhino Group Newsletter, Number 2 (November 1983), pp. 11-13.
2. The World Bank, 1980 World Bank Atlas (Washington, D.C.: The World Bank, 1980), p. 12, and 1983 World Bank Atlas (Washington, D.C.: The World Bank, 1983), p. 16.
3. Esmond and Chryssee Bradley Martin, Run, Rhino, Run (London: Chatto and Windus, 1982), pp. 45-50.
4. By 1979 most of Kenya's rhinos had been poached, but in that same year the Wildlife Conservation and Management Department was finally able to defeat the Somali gangs operating in and around Tsavo National Park, formerly the main area for Kenya's rhinos. Members of the Department used force and shot some of the leaders of the Somali gangs. Since then, the rhino population has remained fairly stable at about 200 (Personal communication with Bill Woodley, formerly a senior warden with the National Parks of Kenya and now a senior advisor with the Wildlife Conservation and Management Department, presently working in Tsavo, 7 August 1985).
5. The estimate for the number of rhinos in Uganda during the late 1960s comes from Keith Eltringham, a former long-term resident of Uganda and now in the Department of Applied Biology, University of Cambridge (Personal communication, 20 March 1983).

6. Reginald Green, "Magendo in the Political Economy of Uganda: Pathology, Parallel System or Dominant Sub-mode of Production?", Discussion Paper No. 64 (1981), Institute of Development Studies, University of Sussex (England), p. 5 (unpublished).

7. Janet MacGaffey, "How to Survive and Become Rich Amidst Devastation: The Second Economy in Zaire", African Affairs, Vol. 82, No. 328 (July 1983), p. 357.

8. I.S.C. Parker and Esmond Bradley Martin, "Trade in African Rhino Horn", Oryx, Vol. XV, No. 2 (November 1979), p. 157.

9. Markus Borner, "Selous Aerial Survey 1981", African Elephant and Rhino Group Newsletter, No. 1 (April 1983), p. 7.

10. Personal communication with Hugh Lamprey, Regional Officer for Eastern Africa for the World Wildlife Fund, 1986. In addition, see, M. Borner and E. Severre, "Rhino and Elephant Poaching Trends in the Selous Game Reserve", Pachyderm, No. 6 (February 1986), pp. 3-4.

11. Republic of Zambia, Central Statistical Office, Country Profile Zambia 1984 (Lusaka: 1984), pp. 10-12; and Republic of Zambia, Central Statistical Office, Monthly Digest of Statistics, Volume XXI, No. 2 to 3 (February-March, 1985), p. 1.

12. Interviews with traders and other businessmen and government officials, in Zambia during May 1983 and July 1985.

13. N. Leader Williams, "Black Rhino in South Luangwa National Park: Their Distribution and Future Protection", Oryx, Vol. XIX (January 1985), p. 28.

14. Information supplied to the author by Dale Lewis, a zoologist working for the New York Zoological Society, who in 1985 carried out a census of elephants in the Luangwa Valley where he has been resident for many years.

15. Information from Mike Faddy, Chairman, Operations Committee, Save the Rhino Trust, and Phil Berry, former Warden of the Save the Rhino Trust Luangwa Valley Anti-Poaching Unit, Zambia, May 1983. For further details, see, Esmond Bradley Martin, "The Ivory Industry of Zambia", Pachyderm, No. 7 (forthcoming).

16. "Rhino Poaching in Zimbabwe", Pachyderm, No. 6 (February 1986), p.18; and Dick Pitman and Glen Tatham, "Rhino Poaching in Zimbabwe", Pachyderm, No. 5 (July 1985), pp. 14-15.

17. C.A. Spinage, "The Rhinos of the Central African Republic", Pachyderm, No. 6 (February 1986), p. 12.

18. Information from Jean-Marc Froment, a scientist and long-term resident of the C.A.R., supplied to the author in September 1985. See, also, Esmond Bradley Martin and Lucy Vigne, "Rhino Poaching and Conservation", Swara,

Vol. 9, No. 1 (January-February 1986), p. 25.

19. Kes Hillman-Smith, Mankoto ma Oyisenzoo and Fraser Smith, "A Last Chance to 'Save the Northern White Rhino?'," Oryx, Vol. XX (January 1986), pp. 23 and 26.

20. David Cumming, "Chairman's Report", Pachyderm, No. 5 (July 1985), p. 2.

21. Esmond Bradley Martin, The International Trade in Rhinoceros Products (Gland, Switzerland: International Union for Conservation of Nature and Natural Resources and World Wildlife Fund, 1980), p. 57.

22. Esmond Bradley Martin, "North Yemen and the Rhino Horn Trade Today", Swara, Vol 7, No. 2 (March-April 1984), pp. 28-33; and Esmond Bradley Martin, "Rhinos and Daggers: A Major Conservation Problem", Oryx, Vol XIX (October 1985), pp. 198-201.

23. Martin, International Trade in Rhino Products, p. 60.

24. 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.

25. One of the last legal sales of current stocks of rhino horn in Africa was in 1983 at Windhoek, South West Africa (Namibia), when the government sold 99 kilos of rhino horn for 49,500 rand (about \$45,500, or \$460 a 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).

26. Martin and Martin, Run, Rhino, Run, pp. 96-97.

27. Letter to the author from the Department of Agriculture and Nature Conservation, Directorate of Nature Conservation and Recreation Resorts, 7 May 1984.

28. Some South African official figures are available for 1973, 1974, 1977 and 1978 in Martin, International Trade in Rhino Products, p. 58.

29. Unpublished information supplied to the author by the Agriculture and Fisheries Department, Hong Kong, 13 August 1984.

30. Martin, International Trade in Rhino Products, p. 56.

31. G.F.T. Child, "The Trade in Elephant and Elephant Products in Zimbabwe", in The Status and Conservation of Africa's Elephants and Rhinos by D.H.M. Cumming and Peter Jackson (Gland, Switzerland: International Union for Conservation of Nature and Natural Resources, 1984), p. 158.

32. Republic of Kenya, Ministry of Planning and National Development, Central Bureau of Statistics, Economic Survey 1986 (Nairobi: Government Printer, May 1986), p. 156.

33. Economic Survey 1986, p. 155.

TABLE I

ESTIMATED NUMBERS OF BLACK RHINOS IN AFRICA

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

Sources: Esmond and Chryssee Bradley Martin, "Horns of a Dilemma", BBC Wildlife, Vol. 3, No. 3 (March 1985), p. 130; David Western and Lucy Vigne, "The Deteriorating Status of African Rhinos", Oryx, Vol. XIX (October 1985), p. 216; David Cumming, "Chairman's Report", Pachyderm, Number 6 (February 1986), p. 1; and letter from David Cumming to Simon Stuart, Species Programme Officer, IUCN, 13 June 1986.

TABLE II
ESTIMATED NUMBERS OF BLACK RHINOS COUNTRY BY COUNTRY IN AFRICA

<u>Country</u>	<u>1980</u>	<u>1984</u>	<u>1986</u>
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

(See following page for sources)

Sources: Kes Hillman, "African Rhino Action Plan", mimeographed for IUCN/NYZS African Rhino Survey, 4 July 1980; David Western and Lucy Vigne, "The Deteriorating Status of African Rhinos", Oryx, Vol. XIX (October 1985), p. 216; David Cumming, "Chairman's Report", Pachyderm, Number 6 (February 1986), p. 1; and letter from David Cumming to Simon Stuart, Species Programme Officer, IUCN, 13 June 1986.

TABLE III

ESTIMATED NUMBERS OF WHITE RHINOS COUNTRY BY COUNTRY IN AFRICA

<u>Country</u>	<u>1980</u>	<u>1984</u>	<u>Type</u>
South Africa	2,500	3,330	southern
Sudan	400	10	northern
Zaire	400	15	northern
Zimbabwe	180	200	southern
Namibia	150	70	southern
Botswana	70	200	southern
Swaziland	60	60	southern
Mozambique	30	20	southern
Kenya	25	30	southern
Central African Republic	20	1	northern
Zambia	5	10	southern
Uganda	<u>1</u>	<u>1</u>	northern
Totals:	3,841	3,947	

N.B. Although there has been an increase in the total numbers of white rhinos in Africa, the northern subspecies has declined from an estimated 821 in 1980

to only 27 in 1984.

Source: David Western and Lucy Vigne, "The Deteriorating Status of African Rhinos", Oryx, Vol. XIX (October 1985), p. 216.