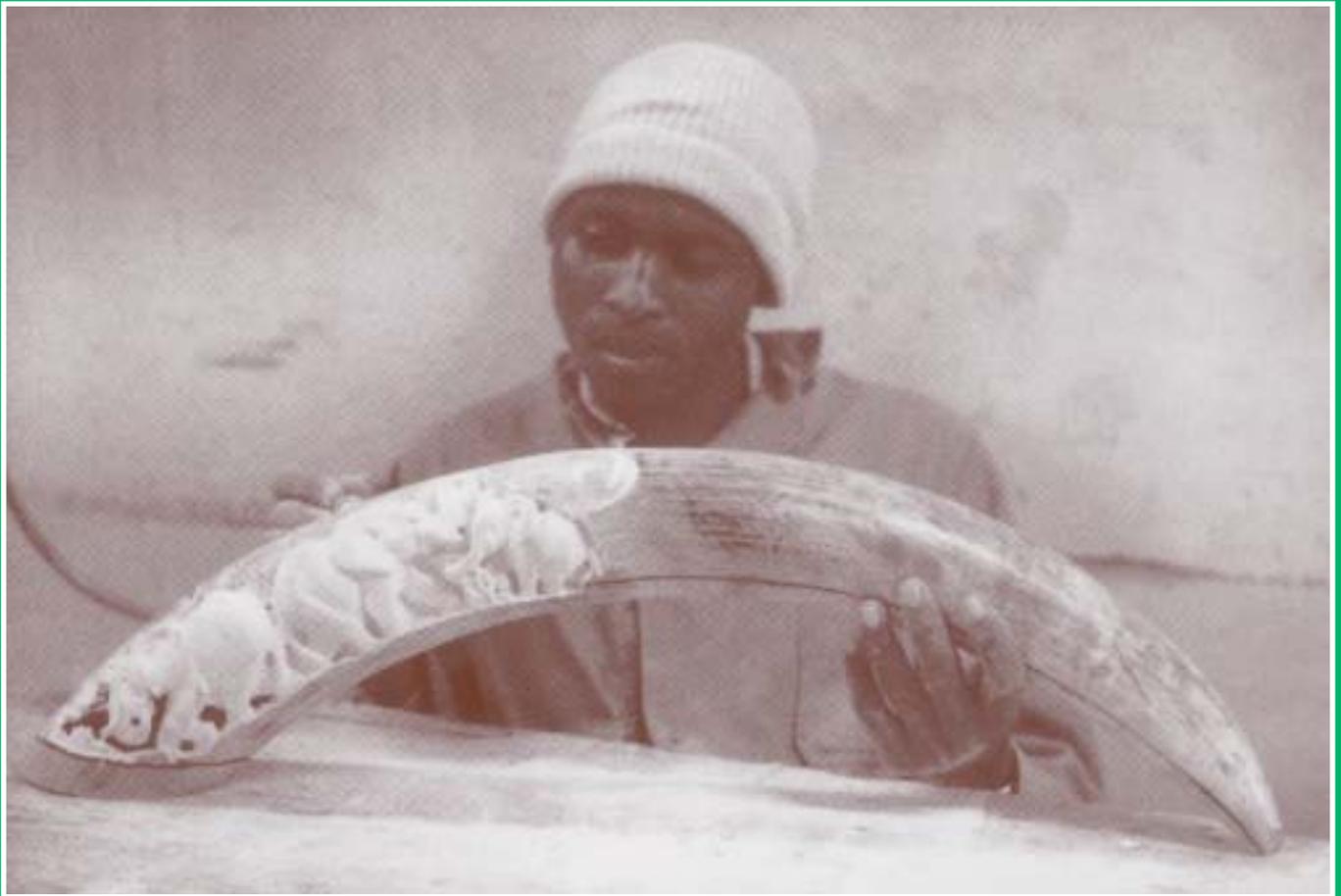


The Ivory Markets of Africa

Esmond Martin and Daniel Stiles



Published by Save the Elephants

PO Box 54667
Nairobi
Kenya

7 New Square
Lincoln's Inn
London WC2A 3RA

March 2000



SAVE THE ELEPHANTS

© Esmond Martin and Daniel Stiles, March 2000
All rights reserved

ISBN No. 9966-9683

Front cover photograph:

Carving a large tusk, as seen here in Zimbabwe in the mid- 1980s, is now rare because such tusks are extremely hard to sell. Most of the former ivory craftsmen have left the business.

Photo credit:
Esmond Martin

Published by Save the Elephants, PO Box 54667, Nairobi, Kenya
and 7 New Square, Lincoln's Inn, London WC2A 3RA, United Kingdom.

Printed by Majestic Printing Works Ltd., PO Box 42466, Nairobi, Kenya.

The Ivory Markets of Africa

Esmond Martin and Daniel Stiles

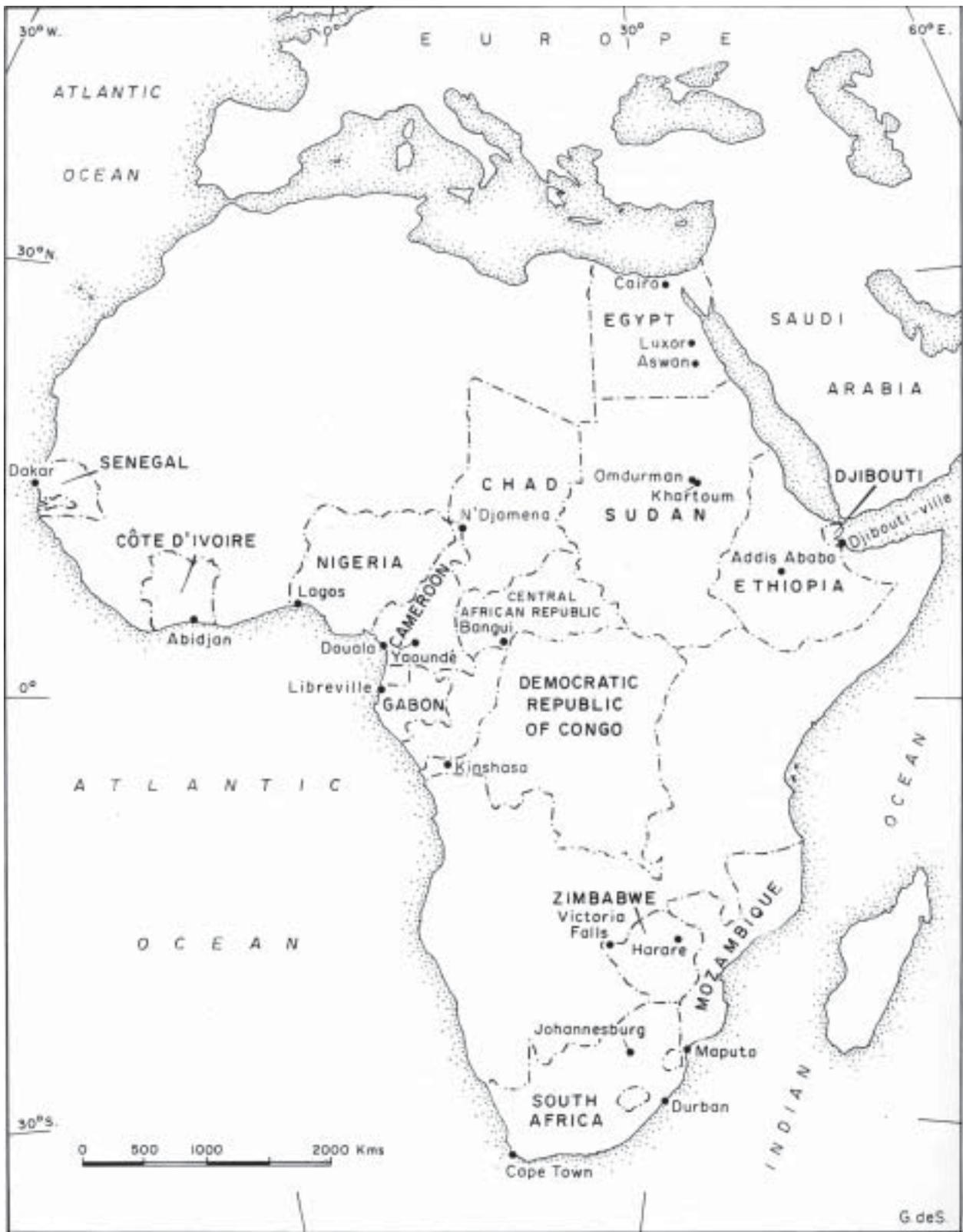
Published by Save the Elephants

PO Box 54667
Nairobi
Kenya

7 New Square
Lincoln's Inn
London WC2A 3RA

March 2000
Reprinted 2002

ISBN 9966-9683



Countries and cities visited in the 1999 survey of the ivory markets of Africa plus Sudan and Egypt where ivory data were collected in 1997 and 1998 respectively.

Contents

List of tables	4
Executive summary	6
Introduction	7
Methodology	8
Countries surveyed in 1999	9
Democratic Republic of Congo (DRC)	9
Gabon	15
Central African Republic (CAR)	19
Cameroon	24
Nigeria	32
Côte d'Ivoire	37
Senegal	47
Chad	51
Djibouti	53
Ethiopia	56
Zimbabwe	60
South Africa	65
Mozambique	70
Results	74
Ivory trade in Africa in 1999 compared with the 1980s	77
Discussion	81
Conclusion	85
Acknowledgements	86

List of tables

Countries surveyed in 1999

DRC: Kinshasa

- Table 1 Average retail prices for ivory items at the Bikeko Market, Kinshasa in June 1999.
Table 2 Ivory carver earnings per month in Kinshasa in June 1999 and 1996-98.
Table 3 Price per kg for raw ivory in June 1999 and 1996-98, Kinshasa,

Gabon: Libreville

- Table 4 Average retail prices for ivory items in Libreville in June 1999.
Table 5 Comparison of average retail prices for ivory items in Libreville in June 1989 with June 1999.

CAR: Bangui

- Table 6 Average retail prices for ivory items in the Crafts Centre and the Hotel Sofitel, Bangui in June 1999.

Cameroon: Douala, Yaounde

- Table 7 Average retail prices for ivory items in Douala in June and July 1999.
Table 8 Comparison of average retail prices for ivory items in Douala/Yaounde in June/July 1989 with June/July 1999.
Table 9 Average retail prices for ivory items in Yaounde in June and July 1999.

Nigeria: Lagos

- Table 10 Average retail prices for ivory items in Lagos in July 1999.
Table 11 Comparison of average retail prices for ivory items in Lagos in July 1989 with July 1999.

Côte d'Ivoire: Abidjan

- Table 12 Average retail prices for ivory items in Abidjan in July 1999.

Senegal: Dakar

- Table 13 Average retail prices for ivory items in Dakar in July 1999.

Chad: N'Djamena

- Table 14 Average retail prices for ivory items in N'Djamena in November 1999.

Djibouti: Djibouti-ville

- Table 15 Retail outlets selling ivory items in Djibouti-ville in June 1999.
Table 16 Average retail prices for ivory items in Djibouti-ville in June 1999.

Ethiopia: Addis Ababa

- Table 17 Average retail prices for ivory items in Addis Ababa in February 1993
Table 18 Average retail prices for ivory items in Addis Ababa in June 1999.
Table 19 Average prices paid for raw ivory by the craftsmen or workshop owners in Addis Ababa in early 1999.

Zimbabwe: Harare, Victoria Falls

- Table 20 Average retail prices for ivory items in Harare in July 1999.
Table 21 Gazetted prices for elephant ivory for local registered manufacturers from the stockpiles held by the Government of Zimbabwe from 1 July 1999.
Table 22 Average retail prices for ivory items at Victoria Falls in July 1999.

South Africa: Johannesburg, Cape Town, Durban

- Table 23 Average retail prices for ivory items in the Johannesburg shop that has over 60% of the city's ivory pieces in July 1999.
- Table 24 Average retail prices for ivory items in Cape Town in August 1999.
- Table 25 Average retail prices for ivory items in Durban in August 1999.
- Table 26 ESPU confiscation of ivory from 1 January 1990 to 30 June 1999.

Mozambique: Maputo

- Table 27 Average retail prices for ivory in Maputo in August 1999.
- Table 28 Prices paid by craftsmen in Maputo for raw ivory in 1998 and 1999.

Results

- Table 29 Data for various indicators of the ivory trade and prices for raw ivory mostly in 1999.
- Table 30 Average retail price comparisons in US dollars for ivory items, after bargaining, in Central and West Africa in 1999.

Ivory trade in Africa in 1999 compared with the 1980s

- Table 31 Ivory trade indicators, comparing mid-1989 with mid-1999.
- Table 32 Average retail price comparisons in US dollars for ivory items, at starting prices for various years.

Executive Summary

1. The purpose of this report on the ivory trade, which covers 22 cities within 15 countries of Africa, was to establish base line data on aspects of the trade from which to assess future changes. The main indicators selected to represent this data were: quantities of displayed retail worked ivory, prices of raw and worked ivory, number of retail outlets where ivory items were sold, number of ivory workshops, number of ivory craftsmen, amount of raw ivory processed per month, and the amount of worked ivory sold per month. Additional information was collected on who buys and sells raw and worked ivory and on the sources of tusks and transport routes. Because of the sensitive nature of much of this information (for legal and commercial reasons), informants were not always forthcoming in providing answers to questions; thus there are gaps in the data collected. Where relevant data exist from previous studies, comparisons have been made with the data presented here in an attempt to assess any changes in ivory demand.
2. The two investigators worked independently, visiting 17 cities in 13 countries between May and November 1999. In addition, one investigator (E.M.) conducted earlier studies of the ivory trade in Egypt and Sudan in 1998 and 1997 respectively, the conclusions of which are included in the final sections of the report. The cities visited in 1999 were Addis Ababa (Ethiopia), Djibouti-ville (Djibouti), Harare and Victoria Falls (Zimbabwe), Johannesburg, Durban and Cape Town (South Africa), Maputo (Mozambique), Kinshasa (Democratic Republic of Congo), Libreville (Gabon), Bangui (Central African Republic), Douala and Yaounde (Cameroon), N'Djamena (Chad), Lagos (Nigeria), Abidjan (Côte d'Ivoire) and Dakar (Senegal).
3. There is a moderate illicit movement of tusks from DRC, CAR, Cameroon and Gabon westwards to the ivory carving centres of Abidjan, Lagos and Dakar, and from DRC and CAR northwards to Sudan and Egypt. Some tusks from Sudan and Kenya are smuggled to craftsmen in Addis Ababa. Raw ivory is also being smuggled from Africa to eastern Asia, especially China.
4. Approximately 110,000 ivory items were found displayed for sale in 657 outlets in the 15 countries visited (some of this ivory was old stock more than ten years old). The main retail buyers are tourists from France, Spain and Italy, diplomats, and foreign military, UN and NGO personnel. About 600 ivory craftsmen were working in more than 70 workshops. The cheapest raw ivory was found in Harare (\$8-17/kg), followed by Maputo (\$14-28/kg) and Bangui (\$<15-25/kg). The most expensive raw ivory encountered was in countries with few or no elephants: Cairo (\$80-137/kg), Abidjan (\$41-80/kg) and Djibouti-ville (\$68/kg). Dakar, no doubt, belongs with the most expensive as well, but no reliable prices could be obtained.
5. Abidjan displayed the largest quantity of worked ivory seen (over 20,000 items), followed closely by Harare, with just under 20,000 items. Cairo was third with 11,627, Addis Ababa fourth with almost 10,000 and Luxor and Lagos were next with about 6,000 each. Only 462 items were found in Libreville where both raw and worked ivory sales are banned, and many ivory items were not openly displayed. Djibouti-ville and Victoria Falls also displayed relatively low numbers of ivory items.
6. The demand for worked ivory is very low in most of southern and Central Africa, but for different reasons. In southern Africa, tourist numbers are relatively high, but many visitors do not buy because they are aware of the CITES ivory trade ban. In Central Africa there are few visitors and not many local people can afford to buy ivory. Kinshasa, Bangui, Libreville, N'Djamena and Yaounde all had very slow sales of worked ivory. The exception is Douala in Cameroon where a moderate ivory market exists. Demand for ivory items in Cairo, Lagos and Abidjan was considerably higher than elsewhere, probably due to the larger number of foreign visitors and international professionals working in these cities (such as diplomats, UN personnel and businessmen).
7. Where comparative data exist, it appears that all cities except Lagos have experienced a marked drop in ivory demand since the CITES ban came into effect in 1990. Lagos is the only city where the quantity of ivory displayed and the number of outlets have increased between 1989 and 1999. The worked ivory market in Abidjan was smaller in 1999 than in 1989, but it has risen since a study was conducted there in the early 1990s.
8. Those ivory vendors and craftsmen who knew about the April 1999 raw ivory auctions in Zimbabwe, Botswana and Namibia, and were asked their views, expressed the opinion that the CITES ivory ban may eventually be lifted. These auctions gave them hope for the future of their profession.

Introduction

Although the international trade in elephant ivory is banned by almost every African country, there are significant quantities of tusks and carved items moving illicitly within Africa, especially in Central and West Africa, and from the continent to markets in eastern Asia. Within some African countries there is also a large internal (domestic) trade in ivory objects.

Unfortunately, prior to this study, there have been few statistics and little information available on the present day ivory trade and ivory markets in Africa. With the CITES approved one-off sales of government ivory stocks in Namibia, Botswana and Zimbabwe in April 1999, it has become even more important to have reliable data on the prices and quantities of raw and worked ivory in the principal markets of Africa. In two or three years after the 1999 one-off sales of ivory, data similar to that collected in this report should again be gathered and analyzed in each of the African countries for comparison. Only then can any changes in the trade be assessed accurately (if no other legal trade has been authorized in the interim). With this information, attempts can then be made to find out whether the one-off sales of legal ivory have caused ivory prices to increase, thus encouraging more elephant poaching.

Methodology

The 17 cities (mostly capitals) in the 13 countries chosen for this study are the main ones in Africa involved in the ivory trade: Kinshasa in Democratic Republic of Congo (DRC); Libreville in Gabon; Bangui in Central African Republic (CAR); Douala and Yaounde in Cameroon; Lagos in Nigeria; Abidjan in Côte d'Ivoire; Dakar in Senegal; N'Djamena in Chad; Djibouti-ville in Djibouti; Addis Ababa in Ethiopia; Harare and Victoria Falls in Zimbabwe; Johannesburg, Cape Town and Durban in South Africa; and Maputo in Mozambique. In addition, previous studies by one of the investigators in Sudan (Khartoum and Omdurman) in 1997 and in Egypt (Cairo, Luxor and Aswan) in 1998 (Martin, 1998 and Martin, 1999), have been mentioned in the final sections of the report. This is in order to give as comprehensive a picture as possible for the continent. Congo-Brazzaville and Angola were not visited due to poor security.

In order for more consistency in the collection of data, only two people have been involved in gathering the information: the two investigators, Dr Esmond Martin and Dr Daniel Stiles. This methodology was considered to be more scientific than contracting out to a group of different researchers for each of the countries. In order to save time and money, it was decided that Dr Stiles would work in West and Central Africa and Dr Martin would work in northeast and southern Africa. The fieldwork started in May 1999 and ended mostly in August 1999. Dr Stiles also went to Chad in November 1999 and returned to Cameroon at this time to supplement his information.

In a study such as this, limited time and money meant that not all cities in certain countries such as Nigeria and South Africa could be visited. The funders believed it was more important to obtain as much data as possible in the most important cities within the limited time, and to publish the report before the Eleventh Conference of the Parties to CITES in April 2000, rather than delay the report for more data and analysis.

Both investigators met vendors, owners of the ivory businesses, ivory traders and craftsmen (there were no women working ivory), learning from them about the trade, as well as counting the number of ivory items in the retail shops and stalls. Of course, it was impossible to enumerate every single item seen, but the investigators did count the great majority and made estimates for the remaining ones. Esmond Martin listed his items in value, while Daniel Stiles used a questionnaire sheet listing the most common items first (see Tables). Daniel Stiles made estimates of the weights of the worked pieces found in the outlets displaying ivory. The method employed was to assign an average weight to the type of item in each outlet, then multiply by the number of items in each type class (e.g. 'small bead necklace', 50 g; '20-30 cm bust', 1.5 kg). The average weights could vary from outlet to outlet, depending on the thickness, whether solid or partly hollow tusk pieces were used, etc. The investigator estimated the weights by picking up representative pieces and matching their weights to objects known well. Weights of small items were more difficult to gauge, but their margin of error in overall weight is less than for large items. These calculations were carried out the same day that the outlet was inventoried. For each outlet, whether a retail stall/shop or workshop, there was a computer data sheet that included name, location and the answers (or lack thereof) to the questions asked concerning sales, prices, buyers, etc., in addition to the item by item inventories. Vendors/craftsmen were frequently asked to estimate the weights of objects to assist the investigator. Esmond Martin did not attempt to obtain weights of ivory items because in the cities he visited many of the vendors became highly suspicious of the time he spent in every shop counting items, ascertaining the sizes and obtaining prices.

References

- Martin, E. (1998). New buyers of ivory in the Sudan threaten elephants, *Oryx*, 32 (3), 166-169.
Martin, E. (1999). Tusk trade booming, *BBC Wildlife*, 17 (3), 20-21.

Countries Surveyed in 1999

Democratic Republic of Congo (DRC)

The legal position of the ivory trade in DRC

DRC joined CITES as far back as 1976, the third country to become a member of the Convention, after Nigeria and South Africa, of all the countries surveyed for this report. The selling of worked ivory in Kinshasa is apparently legal and it is openly sold in the central crafts market, hotels and airport. However, at the Range States Dialogue meeting in Arusha in late 1998, a DRC representative said that the trade of worked ivory was illegal, but produced no legislation to back up this statement. Killing elephants is illegal except under controlled circumstances by government personnel. Transporting raw ivory, therefore, must be done secretly. Even though the former Zaire joined CITES in 1976, informants in Kinshasa state that the export of ivory, both raw and worked, can be done illegally through N'Djili Airport with relative ease by bribing police and Customs officers.

Kinshasa

Introduction

The fieldwork was carried out in Kinshasa from 8 to 13 June 1999. The vast majority of worked ivory is found in the Bikeko Market which is located in the appropriately named Place des Braconniers (Poachers Square) in the city centre. The ivory stalls are congregated in one area, with other crafts in other parts of the market. Other wildlife products are also for sale there such as kudu horns, leopard and crocodile skins, turtle carapaces, lion, leopard, hippo and pig teeth, etc., but no rhino horn. Small amounts of ivory are also sold at tourist hotels, one large art school shop and at one airport shop. There are no arts-crafts boutiques nor street stalls.

Retail outlets and prices for worked ivory in Kinshasa

Twenty-six numbered tables sell ivory in the Bikeko Market. Because business is so slow, however, not every table is open every day. For example, on 8 June all were open, on 10 June 14 were, and on Sunday 13 June only nine were open. Because business is so bad, some of the vendors make extended trips to Luanda, Lagos, Abidjan or Dakar to sell worked ivory. The vendors are all local Congolese, but no ethnic group predominates. Some of the table owners are related to some of the others, however. In 1989 there were 68 to 74 ivory table stalls in Bikeko, depending on who you ask, demonstrating that the ivory market has decreased since the CITES ban (De Meulenaer and Meredith, 1989).

Some tables had relatively few pieces (~100) of mainly small items such as bracelets, rings, earrings, necklaces, paperknives, etc. while others carried hundreds of pieces, some quite large carved and polished tusks, figurines, busts and animals. The largest carved tusk weighed 16 kg. The total number of pieces seen amounted to approximately 3,324 weighing an estimated 285 kg. All available ivory was displayed; no stocks were kept in storage. The quality of carving ranged from mediocre to excellent.

An informant said that 80-100 kg of worked ivory is sold each month in Bikeko. The eight table vendors spoken with at length said that they bought about 40 kg total of worked ivory in the last month to replace stocks, which was an exceptionally slow month. Extrapolating to 26 tables makes 130 kg, but since not all are open every day 100 kg a month can be accepted as a general figure for the market as a whole. In the 1995-97 period Bikeko sold about 1,300 kg of ivory a month, according to informants, which shows a 92% decline. The reason given for this precipitous drop was the new government and the civil war. Most of the raw ivory carved in Kinshasa used to originate in the eastern part of the country, now in the hands of the rebels. In addition, there was currently no

overland transport to bring ivory in from neighbouring countries. Under Mobutu, Kinshasa was awash with government officials, foreign businessmen and Chinese construction workers who bought great amounts of ivory. This situation no longer existed. Money was tight. Seven of the vendors recalled what their monthly sales were prior to the ban in 1989. The quantities ranged from 10 to 400 kg per table with a seven table sum range of 770 to 1,040 kg per month. If these tables are representative of the 70 that existed at that time, one could estimate that in 1989 from 7,700 to 10,400 kg a month of ivory was being sold at Bikeko. This figure conforms well with De Meulenaer and Meredith's (1989) estimate of 9,000 kg of ivory a month being processed by workshops in Kinshasa in late 1988.

The main ivory buyers are Italian, Spanish and Portuguese diplomats, Korean businessmen, and Nigerian and Senegalese ivory traders. The few Chinese construction workers who remain buy a little, but not like before. A large number of Chinese were in Kinshasa to build the Kamanyola Stadium, now renamed the Martyrs' Stadium, which is now finished. Almost all of the ivory purchased by buyers is smuggled out. There used to be many more West African traders who came to Brazzaville and crossed the river into Kinshasa to buy raw and worked ivory; but now they were restricted to transporting ivory by air, which limited what they could carry to 20-50 kg. Zairian government officials under Mobutu bought great quantities of worked ivory, but since Laurent Kabila came to power the informant knew of only two ministers who had come to Bikeko, and they bought small amounts. South African and Taiwanese ivory traders also used to come to buy ivory, but they no longer do.

Each Bikeko table is licensed. Each pays the following taxes: 20 centimes a day to the commune, a *patente* (a type of licence) of 100 FC a trimestre to the Ministry of Culture and Art, 50 FC a trimestre to the Province of Kinshasa, 20 FC a month to the city, and there is in principle a national 5% of gross sales tax, but no one pays it. The total monthly taxes come to 76 FC, or \$11.17. (One US dollar is 6.8 FC (Franc Congolese) with the money changers or 4.4 FC in the banks). Ivory is stored each night on the premises in a communal warehouse, locked in trunks.

The Hotel Intercontinental boutique displayed 30 pieces weighing about 3.8 kg. None were large. They had neither bought nor sold any ivory items in the past month. The saleswoman did not know about ivory sales last year or earlier. The Hotel Memling in the city centre had one boutique that carried 41 pieces of ivory weighing about 2 kg. The pieces were jewellery and paperknives. This shop had sold approximately \$100 worth of ivory in the past month, which would weigh at most 200 g. The hotel only reopened recently after having been burned down in the 1991 riots, thus there is no history of earlier ivory sales. There are no other tourist class hotels in Kinshasa. The Académie des Beaux Arts, an art school, carried 23 ivory pieces in their show room weighing about 1.2 kg, but the saleswoman said they rarely sell any and she could not remember when they had last bought any ivory pieces.

The N'Djili Airport shop is located next to the security check-in gate before Immigration. It carried 157 small ivory trinkets, jewellery, small animals and one poorly carved 12 cm animal (totalling about 3 kg). It was not possible to obtain details about their sales.

The retail cost of a finished piece is determined by the cost of the ivory, the carving labour charge, incidental costs to the trader, and the perceived paying potential of the buyer. For example, a 2 kg (—25 cm high) bust would come from a tusk weighing at least twice that, and the cut section from which it was carved would weigh about 2.5 kg. The raw ivory would therefore cost \$125 in June 1999. The labour charge would be \$100-150, as it would take one to two months to finish. A trader buying it from a craftsman would therefore pay \$225-275 for it. The starting price at the Bikeko Market would be in the \$1,000 range, with a last price of around \$500 (\$200/kg of the raw weight). The last price in Kinshasa is generally 80-100% above what was paid to the craftsman, though an inexperienced buyer might pay much more. An experienced buyer, i.e. hard bargainer, could probably get the piece for \$400, depending on how desperate the vendor is.

A hard-to-sell piece will cost proportionately less. A 16 kg tusk in Bikeko with a well carved village scene had a starting price of \$5,000 (\$³¹².50/kg). Two days later it was down to \$2,700. The last price a day later was \$2,000 (\$125/kg), a throwaway price for a piece like that. But it had been sitting there since 1995 and would no doubt be sitting there for quite some time. It is too big to smuggle out easily and too expensive to make it attractive for a trader to try and sell abroad. Smaller pieces such as necklaces, bracelets, rings, combs and so on had a much higher mark-up in

terms of ivory weight. Necklace beads, rings, earrings and other very small pieces are fashioned from *petits poides*, the small pieces that are sawn or chipped off bigger pieces during the course of carving. This ivory is basically retrieved and recycled waste. Combs, hair clips, key chains and other thin pieces are usually carved from slices made on the outer, less desirable area of the tusk, again basically waste. Starting prices for these small pieces would nevertheless commonly be 300% above the last price and be 400-500% of what the vendor paid the craftsman.

Pricing in practice, however, was evidently affected by the use of stocked ivory purchased earlier at lower prices, as the asking and last price sometimes did not fit this model. See Table 1 for a sample of prices for selected pieces.

Table 1
Average retail prices for ivory items at the Bikeko Market, Kinshasa in June 1999.

Item	Size/description	Starting US \$ price	Final US \$ price
Necklace	small beads	15	5
	large beads	30-40	10-12
Bracelet	<1 cm width	10-20	2-5
	>2.5 cm "	50-60	10-15
Animal	5-10cm	50-100	15-30
	10-20 cm	70-400	25-80
	35 cm (lobster)	350	50
Bust	5-10 cm	40-250	15-100
	10-20 cm	150-500	50-150
Figurine	10-20 cm	90-200	30-70
	40-50 cm	150-550	60-250
Carved tusk	1-2 kg	200-500	75-100
Polished tusk	3.5 kg	350	170
Village scene	10 cm (small tusk section)		150
50			
	10-20 cm	"	300
110			
	50-75 cm		500
190			
Lidded box	5-10cm	40	10
Lamp (w/cord & bulb)	30 cm	300	130
Pendant	3-6 cm	4	1-2
Hair clip		5	2-3
Key chain	<5		
cm	6	2	
	5-10cm	10	4-5
	>10cm	20	8
Fruit, 12 pcs	~4 kg	1,500/set	400/set
Crucifix	25cm	40	20
(ivory			
on wood)	18cm	30	15
Walking stick	90 cm (300 g)	100	40
Olive sticks in holder	8-10 sticks in set	40	20

N.B. Converted from FC into US dollars at US \$1 = 6.8 FC.

Ivory workshops in Kinshasa

The investigator was initially told that there were at least 100 ivory workshops in Kinshasa. When an informant/guide had been enlisted to visit workshops, however, the number turned out to be 13. These workshops produce well over 90% of Kinshasa's worked ivory. The remainder is produced by part-time one or two man affairs who primarily make necklaces. Eleven of the 13 workshops were visited. Four were still working large tusk (5-10 kg) segments to make busts and figurines, while others were making more modest figurines, animals, trinkets and jewellery items. Approximately 1.000 pieces weighing 1 80 kg were seen in the 11 workshops. The craftsmen all complained of a shortage of ivory, and some workshops were even carving old, small, discoloured tusks. The workshops are located in the southern suburbs of Cité, Barumbu, Massina, Kinshasa and N'Djili.

Each workshop is commonly at the home of the *chef d'atelier*, the man who 'owns' the workshop, though a couple of workshops were rented buildings used only for work. Each workshop is named after the proprietor, the main ones being Malé Fils, Mangai, Mbaka, Ndombe, Musuphar, Fouti, Mungembo, Bopio and Asimbo. These workshops have operated for at least 30 years, some much longer. There are currently 157 craftsmen working at the 13 workshops, with a range from one to 65. The craftsmen are between ten and 65 years old. Many of these craftsmen today work wood and cow bone, however, because of the ivory shortage and slow market. The busiest workshop processed 250-300 kg a month. Approximately 116 craftsmen can be said to be working ivory at any one time. Most of the craftsmen are Kinshasa Congolese, but some are from Angola, Senegal, Mali or Côte d'Ivoire.

The two years (1996-98) prior to the rebellion (which started in August 1998), there were 240 craftsmen employed at the 13 workshops with a range of from two to 91. Some craftsmen have shifted to other occupations such as selling auto spare parts or farming, and others had left the country, Luanda and Pointe Noire being the most often named destinations. De Meulenaer and Meredith (1989) found 21 registered ivory workshops employing 180 craftsmen in August 1989, plus an additional 12 independent craftsmen. Dublin and Jachmann (1992) state that 90% of the ivory craftsmen seen in 1989 had disappeared from Kinshasa by 1991, following the CITES ban. Therefore, following the CITES ban when the numbers of workshops and craftsmen precipitously dropped, there was a surge of ivory production in Mobutu's last years requiring a large increase in the number of craftsmen, but since 1997 the number of ivory craftsmen has decreased by 52%. Since 1989 the number of workshops and craftsmen has decreased by 38% and 40% respectively in Kinshasa.

There seem to be three classes of craftsmen: (A) The workshop chief and the senior carvers, those who have worked at the workshop for years. These experienced carvers produce the best work, have preferential access to the best tusks, and make the most money (see Table 2). (B) Fairly experienced independent carvers who are attached to a workshop. They buy their own ivory and sell the finished products themselves. They pay a share of the utilities and other expenses (e.g. taxes). Some have their own tools (mainly wooden mallet, chisels and electric drill) but others rent them from the proprietor. (C) Apprentices: these younger craftsmen are often relatives or friends of class A or B carvers, or they are ex-students of the Académie des Beaux Arts who learned to carve on wood. They assist the senior carvers and receive a small salary (\$60-150/month) compared to the craftsmen, depending on their level and skill.

The many independent carvers (class B) make about half the earnings cited above. Ndombe (KF6), not listed, is a wholesaler-distributor who runs the largest workshop and his earnings cannot be estimated. Some of the senior carvers are considered 'master carvers', or artists, who produce exceptionally fine work that commands a high price. These carvers often engrave their names on their work, but some mediocre carvers do so as well. A few pieces by master carvers such as Ndongala (now in Luanda), Asimbo and Balenda (who make busts and animals respectively) were truly flawless works of art produced on beautifully grained ivory (see Table 2). Very few pieces were up to this standard, however.

The craftsmen were reticent to discuss the quantities of ivory processed per month and generally were vague about answering this question, but with the help of an informant a figure was calculated of about 1,600 kg a month total, or 19.2 tonnes a year, which should be considered a very rough estimate. Since only 100 kg a month is sold at Bikeko and negligible quantities sold elsewhere in

Table 2
Ivory carver earnings per month in Kinshasa in June 1999 and 1996-98.

Workshop	Carver's	June 1999	1996-98 (pre-rebellion)	Items made by carver
	name	US dollars	US dollars	
KF1	Mangai	300-500	800-1,000	Busts, figurines, animals
KF2	Mbaka	400-600	1,000-1,500	“ “ “
KF3	Musuphar	200-250	>600	“ “ “
KF4	Malé Fils	800-1,000	Same	Busts
	Balenda	400	Same	Animals (including lobsters)
	Others	150-200	Same	
KF5	Fouti	300	600	Small pieces
KF7	Mungembo	500-1,000	>1,000	Village scenes on tusks
KF8	Bopio	100-150	Same	Necklaces
KF9	Papa Bitima	100-150	Same	Necklaces
KF10	Thomas	300-400	600-800	Figurines, animals, lobsters
KFI 1	Asimbo	?	>1,000	Busts
	(master carver)			
KF12	Boniface	150	250-300	Small animals, crocodiles
KF13	Mbende	120	150	Necklaces
	Ndongala	(Luanda now)	>1,500	Busts
	(top carver)			

N.B. Some earnings were quoted in US dollars and others in FC.

Kinshasa, approximately 1,500 kg of worked ivory per month (less 10-20% wastage) is therefore exported. The 1996-98 amount consumed monthly was estimated to range from 3,260 to 3,720 kg a month. With 1,300 kg of this being sold at Bikeko (according to informants), this leaves a balance of 1,960 to 2,420 kg a month for export prior to the rebellion. No figures for pre-ban ivory consumption could be obtained from informants, except that it was much greater than presently. De Meulenaer and Meredith (1989) estimated that Kinshasa workshops processed 5-10 tonnes of raw ivory in 1989; thus it appears that ivory consumption has at least doubled since then, though it is still considerably below the estimated 60-70 tonnes that were consumed in 1988.

The class A carvers generally work on consignment for Kinshasa residents, usually Bikeko traders, Koreans or Italian and Spanish diplomats. Class B carvers more commonly produce items 'on spec' and then try to sell them at Bikeko, to a hotel or to residents whom they know. Some travel abroad once they have enough money and stock to sell ivory in another country. For example, the main informant, a Bikeko vendor, had bought two 15 kg tusks from Angolan soldiers who had brought the tusks from the east where they had been fighting rebels. He took them to Malé Fils to have them carved into busts and other items. When finished he planned to take all the worked ivory items by air to Luanda to sell. He estimated that his investment costs would be \$3,000, but that he would clear twice this amount in profit.

Sources and prices of raw ivory in Kinshasa

Craftsmen are currently using old ivory stocks and the few new tusks that come in from the provinces free of rebels, such as Equateur, Bandundu and Kasai. No ivory is imported from outside DRC because there is no road transport and flying it in would be uneconomical. Because of the shortage of raw ivory, a South Korean businessman had gone with one of the Congolese workshop owners to eastern DRC via Nairobi to look for tusks at the time of the investigator's visit. The informant could not say how the ivory was to be brought back to Kinshasa, or if it were to be shipped to somewhere in Asia directly.

As a consequence of the shortage, ivory prices have been rising over the past two years and currently seem to be in flux. Three different informants gave three different price ranges for the price craftsmen pay middlemen for raw ivory, shown in Table 3. The general consensus after speaking with many vendors and craftsmen was that prerebellion prices were on average \$30/kg and were now \$50/kg for any decent tusk of a size that can be carved, i.e. >5 kg. The informant

referred to above paid the Angolan soldiers \$50/kg for the 15 kg tusks he bought from them. De Meulenaer and Meredith (1989) present the prices that Kinshasa-based craftsmen were paying in late 1988 through to June 1989 for raw ivory. Apparently prices rose from 8,000 ZR/kg to 30,000 ZR/kg during this period, but the reason is not given. According to Dublin and Jachmann (1992) 5,000 ZR was worth \$16.30 in late 1988, so 8,000 ZR would have been a little over \$26. Kalpers (1991) gave the raw ivory price as \$18/kg from the first middleman to the second in early 1991. Raw ivory prices are therefore higher in Kinshasa now than before the CITES ban, with a dip in the early 1990s. When and if raw ivory in eastern DRC becomes once more widely available in Kinshasa, one can expect that the price will again drop.

An informant from Bukavu, eastern DRC, encountered in Kenya in October 1999, said that raw ivory was very plentiful in eastern DRC. The price was \$20/kg and it could be smuggled into Kenya in trucks hidden with other crafts imports. The informant claimed to be involved in the raw and carved ivory trade himself. In eastern DRC the main buyers of worked ivory currently are Italian missionaries. Raw ivory is also moved into Uganda, and another informant in Kenya gave the investigator the name of a Ugandan who exports raw ivory from DRC and Uganda mixed in with hippo teeth to Hong Kong. In October 1999 this exporter had three tonnes of hippo and elephant ivory ready for shipment to Hong Kong. Tom Milliken and Nina Marshall (TRAFFIC, pers. comm., 2000) report that Uganda prohibits the private harvest of hippo teeth and that therefore all exports theoretically derive from government stocks. Uganda has a poor record of reporting hippo teeth trade, according to the 1999 CITES Significant Trade Review of hippo.

Table 3
Price per kg for raw ivory in June 1999 and 1996-98, Kinshasa.

Tusk weights	1999	1999	1999	1996-98 (pre-rebellion)
	Informant 1	Informant 2	Informant 3	Vendors
<5 kg	\$60	\$20-30	\$40-50	\$25
	5-10 kg	\$70-80	\$50-60	\$50 \$30
>10 kg	\$>100	N/A	\$50	\$30-50

N.B. Prices were quoted in US dollars only.

References

- De Meulenaer, T. and Meredith, M. (1989). The ivory trade in Zaire. In *The Ivory Trade and the Future of the African Elephant*, Ivory Trade Review Group, CITES, Lausanne, Switzerland.
- Dublin, H. and Jachmann, H. (1992). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Six Range States in Africa*. WWF, Gland, Switzerland.
- Kalpers, J. (1991). African Elephant Action Plan for Zaire. African Elephant Conservation Coordinating Group, Oxford, unpublished.

Gabon

The legal position of the ivory trade

It is illegal for non-governmental persons to hunt elephants, transport raw ivory or sell worked ivory in Gabon, thus there is little openly displayed. Gabon joined CITES in 1989.

Libreville

Introduction

The work in Libreville was carried out from 15 to 22 June 1999. Ivory can be found in small quantities in the Village des Artisans and in the Grand Village des Artisans de Libreville, both in the city centre.

Retail outlets and prices for worked ivory in Libreville

The Village des Artisans (VA) is located on Rue Pecquer and the Grand Village des Artisans de Libreville (GVAL) is situated on Avenue Colonel Parant. The VA has been there for many years, but the GVAL was opened only three years ago. The former contains 22 stalls and the latter 53. The number of stalls displaying ivory varied from day to day, except for two in the GVAL which displayed ivory every day of the visits. The VA had two to three stalls displaying ivory and the GVAL had two to four. In addition, one street stall further down on Avenue Parant displayed ivory one day, and others said that they could get ivory if one waited. The investigator visited seven art boutiques, three tourist hotels, about two dozen small street stalls and eleven Senegalese street crafts stalls, but only found one ivory crescent pendant with gold bands in the Novotel Hotel jewellery boutique identical to some seen in the Hotel Memling in Kinshasa. The airport shops carried no ivory.

Most of the eight stalls that displayed ivory had easy-to-carry items such as jewellery, trinkets and knickknacks (see Tables 4 and 5). One stall displayed ivory paperknives with malachite handles, which must have come from DRC as malachite is not found elsewhere in the region. One stall vendor in the VA brought out larger carved pieces from a bag that had been hidden away when asked if he had other pieces. The pieces consisted of a pair of 3 kg raw tusks, two 30-40 cm figurines, eight animals ranging from 10-40 cm in length, three ebony plates with twelve 3-5 cm rose ivory fruit pieces in each, and a pair of 15 cm face profiles. The next day and the subsequent days he displayed no ivory in his stall. Another vendor brought out from hiding approximately 12 kg of ivory made up of 20 animals 10-20 cm in length, five 5-10 cm busts and a few jewellery pieces. Four of the stalls displayed less than 1 kg of ivory. Several stalls carried carved or polished hippo and wild pig teeth and trinkets such as pendants and key chains made from cow bone.

The ivory vendors in Libreville were very suspicious and unco-operative and usually would not answer any questions other than the price of items. This was no doubt due to the fact that selling ivory was illegal, and the government actually enforced the law on occasion, sending inspectors from the Ministry of Water and Forests to check the markets. When they found ivory, the vendor could usually get off by paying a heavy 'fine'; ivory was not confiscated. Almost all of the craft vendors were foreigners, mainly Senegalese (Wolof), Cameroonians (Bamileke) and Ivoirians.

In all, 462 pieces of ivory weighing about 44 kg were counted in a total of eight outlets. No pieces were seen that compared to the quality of carving seen for sale in Kinshasa. Most of it was poor to mediocre, except for a Libreville speciality of ivory parrots perched on ebony branches, which were well carved. Though answers were evasive or entirely lacking, it is obvious that the consumption of worked ivory in Gabon is quite small.

The main buyers are Spaniards who fly in from Equatorial Guinea, Italians, Portuguese and South Koreans, though a few French and Chinese buy small amounts. One vendor said that he had sold 20 kg of small ivory pieces to two Spanish men the week before. Another said that traders from Abidjan came from time to time to buy carved animals and busts. Olivier Langrand of the WWF Central Africa regional office thought that perhaps French military personnel were smuggling out large quantities of ivory, as they arrive in France at military airports where there are no Customs

checks. The investigator asked vendors about this and they said they had never heard of it, and that the French military rarely bought ivory. Mr Langrand also thought that it would be worth checking São Tomé, as it did not belong to CITES and it could be an entrepôt for sending out illegal Gabonese ivory. São Tomé is a popular tourist destination for Gabonese foreign residents.

Allaway (1989) found 48 stalls and several jewellery stores in June 1989 that sold ivory. With hotel boutiques added, there were probably 60 retail ivory outlets in Libreville. He estimated the total weight displayed at 740 kg. There has therefore been roughly an 87% reduction in outlets and a 94% reduction in displayed ivory over the intervening ten years.

Table 4
Average retail prices for ivory items in Libreville in June 1999.

Item	Size/description	Starting CFA price	Final CFA price*
Necklace	large beads	8-22,000	5-9,000
	very large beads	30,000	12,000
Bracelet	<1 cm width	6-8,000	2,000
	1-2.5 cm width		
	>2.5 cm "	12,000	5,000
Earrings, pair		1,000	600
Ring	plain	1,000-2,500	500-1,000
Animal	<5 cm	2-4,000	1,000
	5-10 cm	3-6,000	1,200-2,500
	10-20 cm	4,000-35,000	2,500-9,000
	20-30 cm	30-40,000	10,000-20,000
Human figure	10-20 cm (busts)	15,000	7,000
	10-20 cm (figurines)	15,000	
	20-30 cm (busts)	20,000	10,000
	30-40 cm (figurines)	20-50,000	10-20,000
	Polished tusk	3 kg	60,000
Lidded box	<10 cm	6,000	3,000
Pendant	3-6 cm	1-3,000	500-1,000
Fruit	5-8 cm	1,500-5,000	1,000-1,500
	8-15 cm	8,333	4,000
Paperknife	12-18 cm	2-4,000	1,000-2,000
Book	5x2 cm	6-8,000	3,000
Comb with animals	8-12 cm	6,000	2,500
Hairpin	12cm	3,000	1,000
Parrots on ebony tree	2 @ 6 cm	20,000	9,000
	3@6cm	25,000	10,000

* Estimated.

N.B. US\$1=600CFA.

Table 5
Comparison of average retail prices for ivory items in Libreville in June 1989 with June 1999.

Item	Size/description	June 1989 Starting US \$ price *	June 1999 Starting US \$ price
Necklace	large beads	32.40	13.10-36.10
Bracelet	<1 cm wide	16.10	9.80-13.10
	>2.5 cm	45.20	19.70
	Earrings, pair	3.20-9.70	1.60
Human figure	30-40 cm	194	32.80-82
Animal	20-30 cm	80.65-135	49.20-65.60

* Prices from Allaway, 1989, for comparison with this survey.

N.B. Converted to US dollars at prevailing exchange rates.

Even without adjusting for inflation, there has been a significant decrease in the cost of worked ivory over the past ten years.

Ivory workshops in Libreville

The investigator was unable to find out how many workshops there are in Libreville or how to visit one. Vendors said that there were two or three workshops *en brousse* (in the bush), about 60 km from the city. Supposedly none is in Libreville. No vendor would agree to guide the investigator to visit one. No one at the WWF office knew of any ivory workshops.

Allaway (1989) states that the Gabonese wildlife service had monitored nine ivory workshops in Libreville in May and June 1989, and that others were known to exist. It is doubtful, given the low level of trade, that all nine remain, and those that do, have gone completely underground.

Sources and prices of raw ivory in Libreville

All ivory that is worked for the Libreville market is smuggled into the city from Gabonese poached elephants, according to the traders. The rose ivory that many of the pieces were carved from is probably Gabonese, as ivory from forest elephants is tinted pinkish and is translucent while savanna elephants' ivory is whitish (Parker and Amin, 1983). Vendors said that no raw ivory is imported from neighbouring countries. Olivier Langrand and Pauwel De Wachter from the WWF office said that ivory is poached in the north-east of the country in and around the Minkebe Reserve. Most goes north into Cameroon, but some comes down by river and passes through Makokou on its way to Libreville. Elephants are also poached to the east and south in areas of dense forest, and on the forest fringes where elephants come into conflict with farmers. There are no reliable estimates of the total numbers of elephants killed or quantities of ivory taken, but a report on poaching in and around the Minkebe Reserve estimated that more than 250 elephants were poached a year, mainly by Baka Pygmies led by Fang villagers. Some of this elephant poaching is for meat for local consumption. Nigerians and Cameroonians come to buy the ivory. Most of the ivory is sold in Yaounde for a reported 25,000 CFA/kg (\$41/kg) (Huijbregts, 1999).

Vendors and craftsmen have an option from a 1989 government decree that would allow them to buy ivory from government stocks, but they have not taken advantage of it (O. Langrand, pers. comm., 1999). If they would organize themselves and set up a system of ivory management, including registration and tracking of legal ivory, government stocks of registered and numbered tusks would be sold to them. They have not taken advantage of this option because, being mainly foreigners, they do not want to come under government surveillance. Allaway (1989) states that new legislation in 1989 called for the licensing of ivory craftsmen and vendors and the registration of their stocks. Annual licence fees would be 300,000 CFA (\$937.50) for Gabon nationals and 450,000 CFA (\$1406) for foreigners, which largely explains why the ivory trade went underground in 1989. Prior to that time, says Allaway, the worked ivory industry was vigorous and expanding in Gabon. In addition, it was made illegal to deal in tusks under 5 kg. Since many poached tusks weigh less than this they would have to be dealt with clandestinely anyway. In 1990 all internal trade in ivory was banned through an administrative order, but because this decree was never gazetted, the situation remains ambiguous (Dublin et al., 1995). Ivory craftsmen and vendors have chosen to remain covert.

Stocks of poached raw ivory are kept in Libreville and Port Gentil, a town that caters to expatriates in the oil industry. The investigator entered into negotiations to buy as much ivory as possible with one of the vendors who seemed quite well connected with the business. He initially said that he could get 400 tonnes. He provided a photograph of a pair of 18 kg tusks and, after a request, he produced an inventory of what he could provide. The list showed 21 pairs of tusks ranging from 20 kg/pair (10 kg each) to 5 kg/pair. The 42 tusks weighed a total of 252 kg, some 0.06% of what he said he could supply, with an average weight of 6 kg a tusk. The vendor said that he could double this amount in a few days, but that he needed money from the investigator first to scour the villages and Port Gentil. This would seem to indicate that there was no more than a half tonne of raw ivory available in June 1999 in the Libreville area.

The asking price for 1-5 kg tusks was 20,000 CFA/kg, or \$33.33/kg (\$1 = 600 CFA). The >5 kg tusks cost 28,000 CFA/kg, \$46.67/kg. After bargaining he agreed to 18,000 CFA/kg (\$30/kg) for 1-

5 kg tusks and 25,000 CFA/kg (\$41.67/kg) for >5 kg tusks, though a lower price could probably be obtained with more sustained bargaining. Also, since he was a second middleman raw ivory prices to craftsmen would be lower still.

According to Allaway (1989), the price that the Gabon government sold raw ivory in June 1989 prior to the CITES ban was 5,000 CFA/kg (\$15.65/kg) for <5 kg tusks, 10,000 CFA/kg (\$31.25/kg) for 5-10 kg tusks and 15,000 CFA/kg (\$46.90/kg) for tusks larger than 10 kg. Prices were therefore somewhat more expensive in June 1999 than in June 1989 in absolute dollar terms, though if inflation is taken into consideration prices are cheaper today.

References

- Allaway, J. (1989). The ivory trade in Gabon. In *The Ivory Trade and the Future of the African Elephant*, Ivory Trade Review Group, CITES, Lausanne, Switzerland.
- Dublin, H., Milliken, T. and Barnes, R. (1995). *Four Years After the CITES Ban: Illegal Killing of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.
- Huijbregts, B. (1999). Elephant poaching in the northern parts of the Minkebe forest, Gabon. WWF Mission Report, 17 January-9 February 1999, Libreville, Gabon.
- Parker, I. and Amin, M. (1983). *Ivory Crisis*. Camerapix, Nairobi, Kenya.

Central African Republic (CAR)

The legal position of the ivory trade in CAR

Internal ivory sales are legal in CAR under certain conditions. All ivory is supposed to be *conventionné*, or approved, by the government as either found or confiscated and then sold by licence to users. In practice, however, vendors said that the government sells no ivory by licence. All raw ivory used by craftsmen in Bangui is therefore illegal, obtained from poached elephants or from government personnel through the back door. This explains the discrepancy between the volume of ivory reported by the government (Milliken, 1997) and that declared to CITES in 1997. CAR joined CITES in 1980. Sport hunting is legal in CAR, but few foreign sport hunters come these days because of political instability in the country.

Bangui

Introduction

The work took place from 24 to 28 June 1999 in Bangui. UN peacekeepers patrolling the streets, sandbagged check points, and buildings peppered with bullet holes from two army mutinies greeted the investigator. At the time of his visit shooting was going on in the streets of the suburbs between police and demonstrating northerners in events related to ethnic conflict and the approach of presidential elections. Travel outside the capital is restricted for foreigners due to the political instability, and permits are required.

Worked ivory is sold mainly in the Centre Artisanal on the Avenue de l'Indépendance, and a small amount is sold at the Hotel Sofitel and the Perroni Art Shop. No street stalls sell ivory and there are no shops in the airport.

Retail outlets and prices for worked ivory in Bangui

The Crafts Centre (Centre Artisanal) is an open air market containing 36 stalls and jewellery boutiques, 24 of which sell varying quantities of ivory. The vendors were quite co-operative and the investigator inventoried 15 stalls with ivory and five jewellery boutiques. Four other stalls carried negligible amounts of ivory. More than half the stalls were run by Senegalese, about 30% by Cameroonians, and the rest were Chadians, Malians, Ivoirians and two were Centraficans (from CAR).

Few pieces were more than 30 cm in length. Most pieces were jewellery, trinkets, plates of fruit, small animals, figurines and busts, with several small to medium size carved and polished tusks (30-50 cm, <1-3 kg), (see Table 6). The number of very small tusks (10-20 cm) indicated that even very young elephants were being poached. There was a total of 2,021 pieces weighing approximately 112 kg in the centre, including the jewellery shops. The quality of carving was in general mediocre, except for one unusual piece, the bust of an Mbororo woman measuring 40 cm high and weighing about 5 kg. The carving and finish were excellent and it was much larger than any other bust in the market.

There were many pieces made from cow bone and hippo and wild pig tusks. Some were quite large and, if the shafts and tips were carved, resembled elephant ivory. Many of the trinkets made of highly polished cow bone also looked like ivory, except that they did not display the grain common to ivory. The vendors seemed to be fairly honest about distinguishing between ivory and other materials. They said that the sale of so many of these other pieces was due to the ivory shortage.

One Senegalese shop owner took the investigator into the back room to bring out hidden away 'ancient' art pieces that supposedly came from Mobutu's looted Gbadolite palace. They included statuettes of Songye (DRC), Bakuba (DRC), Baule (Côte d'Ivoire) and Ife (Nigeria) couples, an elephant and a large bracelet. The prices were quoted in French francs and ranged from 1,000 to 35,000 FF. They looked quite genuine and were beautifully carved and aged, but later similar 'ancient' pieces were encountered in other shops. A woman made the mistake of revealing that her Bakuba statuette came from Nigeria, and subsequently it was discovered that there are Nigerian and Cameroonian industries producing fake art pieces using African art books as a guide. The presence of both modern and 'ancient' FESTAC masks, along with the other 'ancient' pieces, indicates that ivory worked in Nigeria and/or Cameroon is being imported into CAR. FESTAC

was a large international African arts festival held in Nigeria in 1977, and a distinctive Queen Idia of Benin mask, the original of which is kept in the National Museum in Lagos, was used as its symbol. Copies of this mask are common in Lagos ivory shops.

Table 6
Average retail prices for ivory items in the Crafts Centre and the Hotel Sofitel, Bangui in June 1999.

Item*	Size/description	CFA price (after bargaining)
Necklace	small beads	1,500-3,000
	large beads	6,000-8,000
Bracelet	<1 cm width	2,000-3,500
	<1 cm width (child size)	500-1,000
	1-2.5 cm width	4,500
	>2.5 cm "	4,000-6,000
	>2.5 sections	2,500
	Elephant hair with plaque	1,000-2,000
Ring		500-1,500
Earrings, pair		700
Animal	<5 cm	2,000
	5-10cm	8-12,000
	10-20 cm	7,000**-40,000
	20-40 cm	25,000
Human figure	5-10 cm, thin	3,000-5,000
	5-10 cm, thick	13,000-23,000
	10-20 cm, thin	5,000
	10-20 cm	15,000-35,000
	20-30 cm	18,000-35,000
	30-40 cm	40,000-280,000
Carved tusk	<1 kg (20 cm, 200 g)	17,500-20,000
	1-2 kg	20,000
Polished tusk	2-3 kg	30,000
Lidded box	5-10 cm	4,000-6,000
	>10cm	8,000-12,000
Pendant	3-6 cm	2,000
Fruit, 12 pcs	3-6 cm each	2,000-8,500/set
	7 cm each	7,000/set
Paperknife	12-22 cm	1,500-2,000
Comb with animals	8-12cm	6,000
Pendant		2,000
Hair pin	12cm	1,500
Hair clip		1,000-2,000
Olive sticks	12cm	1,500
Knife stand	set of 6	5,000
Key chain		1,800
Salt dish with spoon	5 cm	5,000
Enamelled ashtray		3,500
Chess set (ivory and ebony)		80,000
Grape bunch	2kg	55,000

* Excludes items in workshops, "antique" pieces, old ivory and jewellery pieces with gold.

** This cheap piece was due to the subject. The animal had the mouth of a hippo, a lion's mane, and the body of a rhino.

N.B. US\$ 1 = 610 CFA.

The Crafts Centre outlets range in size from medium size shops (usually Senegalese owned) to small stalls sharing a communal sheltered area. Only one shop specialized in ivory, displaying 53 pieces (~9 kg), half of which were 'ancient' pieces carved on old ivory. The vendor also said he had an art piece from the Gbadolite palace hidden away. Only one large Senegalese shop carried a substantial amount of worked ivory (~35 kg), but the majority of items consisted of wood masks, leather work, bead jewellery and textiles. The outlets pay various fees and taxes, but they were not enumerated.

The Hotel Sofitel displayed 21 ivory pieces, including a Madonna figurine, an Akwa Ba, a few odds and ends and a chess set, all estimated to weigh 3 kg total. The carving of the items was not particularly good. The Hôtel du Centre, the former Novotel, sold no ivory. The Perroni Art Shop, the only arts-crafts boutique in Bangui, carried no carved ivory pieces. The only ivory displayed was found in 17 large, framed wall plaques made up of flat ivory scales arranged in geometric figures, the total no more than 1 kg in weight. Another 98 pieces weighing about 76 kg were seen for sale in three ivory workshops (see below). In all, therefore, there were 2,157 pieces weighing about 192 kg in Bangui.

The vendors complained of a shortage of ivory and of very poor business. Tourists and business people rarely come to CAR because of the instability. The main ivory buyers now are Chinese and Japanese involved in road construction and Egyptian, Canadian and West African UN peacekeepers. West African traders, mostly Senegalese and Nigerians, used to come to buy large amounts of raw and worked ivory, but they are also rare now as raw ivory no longer comes to Bangui in any appreciable amount. Because of poor business some vendors travel to Abidjan or Dakar to sell their wares. They say Customs is no problem, small bribes suffice to export and import ivory anywhere in Central and West Africa. The vendors were vague and evasive about the quantities of ivory that they sold per month and the investigator was unable to make an estimate. They all agreed that business was much better in the early 1990s under President Kolingba and that the last five years had seen a steady decline in the worked ivory trade, corresponding to the collapse of the general economy.

Bangui displayed the lowest prices for raw and worked ivory of any place in the study in Central and West Africa. Vendors were quite desperate to sell, and some of the prices quoted above after only moderate bargaining were equal to or less than the current cost of raw ivory for the weight. The starting price of the 40 cm Mbororo bust was 450,000 CFA, but after moderate bargaining the vendor came down to 280,000 CFA (\$459), which works out to \$91/kg for the worked ivory.

Ivory workshops in Bangui

The vendors were evasive about the existence of ivory workshops, and many claimed that there were none in Bangui. Several vendors said that most ivory carving is done in Bangassou, a town on the DRC border about 650 km to the east. There were also said to be a few craftsmen working ivory in Bambari, about 320 km from Bangui on the road to Bangassou. The reticence on the part of the vendors was no doubt due to the fact that all raw ivory worked in Bangui is illegal, and they did not know who the investigator was, and to the fear of losing a potential customer to a workshop, where ivory items would no doubt be cheaper.

A vendor was eventually found who would act as a guide to the ivory workshops. Two workshops were in the Mustapha suburb and one was in Mesquine. Other ivory workshops used to exist, but they had either closed or had converted to wood, bone or hippo/pig tusk carving because of the dearth of elephant ivory and the slow market. A former ivory workshop (now converted to wood) was visited and a carver said that the craftsmen there would work ivory if a buyer would commission items and provide the ivory.

The first workshop visited consisted of one man making ivory beads. The proprietor said that he usually only makes necklaces, but that when he is commissioned to make something else he will. He bought cast-off pieces from other workshops, but he would not reveal how much he paid, nor could he say how much ivory he used a month. He said that work was very variable, sometimes there was none, and sometimes if a big order came in he would have to hire a helper. He sold all of his work to vendors at the Crafts Centre. There was no more than 0.5 kg of ivory in the workshop.

The next workshop, also in Mustapha, was the largest in Bangui. It currently employs six full-time craftsmen and helpers in total, though two years ago and before, it employed ten. The workers were making small busts and bracelets at the time of the visit in a workshop to the rear of the proprietor's house. Licensing permits dating 1987-1995 were on the wall, so ivory carving was legal at least then. The proprietor reluctantly answered some questions, but he was quite wary and suspicious. A few carved ivory pieces were displayed in his sitting room cabinet. He also brought out 12 unmounted polished tusks 70-80 cm long weighing 2-4 kg each that were for sale. In all, 22 pieces weighing approximately 39 kg were counted. He said that ivory was scarce now, especially >5 kg tusks, but when the investigator offered to buy as much as he could provide, he said he could find up to a tonne. He echoed the vendors' sentiments by saying that the ivory business was very slow now; it used to be much better before the CITES ban.

The last workshop employed four workers, but only one was working at the time of the visit. He was carving a small bust, and two 20 cm unfinished carved tusk busts lay near by. The proprietor was much more open and allowed an inventory to be taken of his stock on hand, which included pairs of 7 kg, 3.5 kg and 2 kg tusks, a 5.5 kg section cut from a 20 kg tusk, a pair of 2.5 kg carved tusks, four small, dirty little tusks weighing about 200 g each, one small bust, and 62 bracelets of varying widths. In all 76 pieces weighing a little over 37 kg were counted. The owner said he used to consume up to 100 kg of ivory a month, but now there was no business and little new raw ivory. He also said that >5 kg tusks no longer came to Bangui; he was now using up his old stock to make any large pieces that might be commissioned, which had not happened for a long time. He would sell the whole tusks and tusk sections if a buyer could be found. His workshop had not changed in size for several years.

There are a number of independent ivory craftsmen who look for commissions in Bangui. One such carver named Dagba Alain was the carver of the exceptional Mbororo bust mentioned above. A beautiful figurine carved by him was also found in the Crafts Centre. He is the only Centrafrican (from CAR) 'master carver' identified. He was in Bambari, carving a piece on commission at the time of the visit.

There are three ivory workshops employing 11 - 12 workers full time, plus an estimated five to ten independent craftsmen working occasionally in Bangui. In 1989 there were probably double this number, but Bangui has never been a large market for domestic carved ivory.

The main buyers at the workshops were Chinese and Japanese road construction staff and Egyptian and Canadian UN peacekeepers. Diplomats of different European embassies occasionally also ordered pieces.

Sources and prices of raw ivory in Bangui

The little ivory that does come to Bangui comes from the north-east and the east of the country. Vendors said that Bangassou was the ivory centre and that much ivory from DRC passed through there on its way to Sudan and to Nigeria, bypassing Bangui. Martin (2000) found that Baggara Arabs from Sudan poach elephants in eastern CAR and transport the ivory into Sudan, where some of it ends up in Egypt. West Africans, mainly Nigerians, are also involved in buying ivory from CAR and DRC and transporting it across western Sudan to Khartoum by truck. Since none of the ivory is government approved, it is risky to transport raw ivory near Bangui where there are numerous road blocks and searches. If ivory is found, the police confiscate it to sell privately, unless a large 'fine' is paid. Carved ivory can be transported with little problem, according to informants, and pieces from Bangassou and Bambari travel to Bangui. Informants said that there is little poaching in the south-west of the country now, as WWF had a big project there, but the little ivory that is poached goes to Cameroon. In the south-east, some Sudanese are poaching elephants for ivory and meat; most of this ivory goes to Sudan (Martin and Hillman Smith, 1999).

The workshop owners gave conflicting prices for raw ivory. The first was proposing 1-5 kg tusks at \$20-25/kg and the second asked for 25,000 CFA/kg (\$41/kg) for <1 kg tusks and 28,000 CFA/kg (\$46/kg) for anything larger, even >5 kg tusks. The second man, however, offered to sell the 5.5 kg base section of a huge tusk for 80,000 CFA, or 14,545 CFA/kg (\$23.85/kg) and two polished tusks weighing 3.5 kg for 80,000 CFA the pair, or 11,430 CFA/kg (\$18.74/kg). This was before bargaining in all instances. It would be safe to say that <1 kg tusks could be purchased at

less than \$ 15/kg, 1-5 kg tusks at \$ 15-20/kg, and >5 kg tusks at \$ 20-25/kg, particularly if bought in large quantities.

Vendors said that raw ivory prices had remained about the same over the past few years. The lack of demand has kept ivory prices in Bangui stable even in the face of dwindling supply.

References

- Martin, E. and Hillman Smith, K. (1999). Entrepots for Rhino Horn in Khartoum and Cairo Threaten Garamba's White Rhino Population, *Pachyderm*, 27, 83-84.
- Martin, E. (2000). The present day Egyptian ivory trade, *Oryx*, 34, (2) in press.
- Milliken, T. (1997). The Status of Ivory Stocks in Africa, 1990-1996, *TRAFFIC Bulletin*, 16 (3), 93-106.

Cameroon

The legal position of the ivory trade in Cameroon

The selling of worked ivory in Cameroon is legal under permit and raw ivory can be possessed, transported and traded internally provided it has a Certificate of Origin issued by the government and it is registered and marked (Dublin et al., 1995). Cameroon joined CITES in 1981. Sport hunting is legal in Cameroon, but elephants with tusks smaller than 10.1 kg each are protected.

Douala

Introduction

Douala was visited from 14 to 15 June, 29 June to 3 July, 9 July and 8-13 November 1999. Most of the worked ivory sold to the public in Douala is found at the Artisanat Central, located on the Rue de Gaulle in the Bonapriso suburb. Tourist hotels and seven workshops in the Akwa and Bali suburbs also sell moderate amounts of ivory, and a small amount is sold at the airport.

Retail outlets and prices for worked ivory in Douala

The Artisanat Central is composed of about 80 arts-crafts stalls near the flower market about 4 km from the city centre. The crafts centre was originally located at the Chateau d'Eau, then moved to the Akwa Stadium, and about six years ago moved to its present location. Thirteen of the stalls were found to sell ivory, but only one of them specialized in ivory (228 pieces weighing 57.5 kg) and only six had moderate quantities of ivory. A total of 1,229 pieces weighing approximately 125.5 kg was counted. The average weight per piece was 102 g. This market was visited again in November and there had been considerable turnover. The stall with the 228 pieces above now had 347 pieces weighing about 65 kg, and a shop next to it that had carried several carved and polished tusks and animals now had few of them left. The vendor said he had not replaced the pieces as he was saving up for a trip to Europe to sell crafts.

The crafts centre sold a great variety of ivory items ranging from the usual jewellery pieces, animals, human figures and carved tusks through to more unusual items such as rose stems, Oriental signature stamp blanks (name seals) and human figurines with animals attached. Two stalls contained disks of ivory measuring about 5 cm in diameter and one cm thick. The vendors said that Europeans sometimes bought them, presumably to fashion something from them. Some of the shops displayed an unusually high proportion of carved and polished tusks, all less than 5 kg in weight, which by law are illegal. Vendors said that illegal ivory is used for working most pieces, but that the authorities did not bother them. When asked where the ivory was carved, not one vendor would divulge the location of workshops in Douala. Some said the workshops were *en brousse* (in the bush), others said that workshops were located in the north of the country. No pieces of worked hippo or wild pig teeth were seen.

The main people who sell ivory in the crafts market are Hausa and Fulani, followed by Senegalese Wolof and Bamileke from Yaounde. The Hausa have friends and family in the crafts trade in Nigeria and CAR, which facilitates the international trade in worked and raw ivory between these countries and Cameroon. The family networks extend to Europe, as one vendor said that his brother worked in Spain and that he always took ivory with him to sell there after a visit home. The vendor said that there was a good market for ivory in Spain, and that other traders took ivory along with other crafts items on extended trips through Spain, Italy, France and Belgium. The carved ivory pieces are coated with a slip of dark clay, then dried in the sun so that they resemble terra cotta pieces. After arrival in Europe the pieces are tapped to break the coating and then washed.

All vendors were vague about the quantities of ivory bought and sold per month and therefore it was not possible to estimate rates of ivory consumption. One vendor said that he sold more ivory now than a year ago, but others said that business was worse. All agreed that the ivory trade had dropped considerably since the CITES ban. The turnover observed at the one large ivory shop in the Artisanat Central and at one of the shop-workshops in Akwa was quite high between July and November, however. The main buyers of worked ivory were said to be Japanese, Spanish,

French and Italians, and one vendor said that American ship captains who come to the Douala port buy ivory. Two Italian men came to a stall while the investigator was there and the vendor, who had the second largest quantity of ivory in the centre, knew them by name and was on very good terms with them. They proceeded to talk about ivory.

There are two types of stalls in the Artisanat Central, *boutique* and *comptoir*, the latter being deeper though the widths of each seem to be about the same. Each is numbered. Some vendors combine two or three stalls to make a larger shop. The boutiques pay 10,000 CFA a month and the comptoirs pay 5,000 CFA a month rent. Each stall keeper pays an *impot liberatoire*, an annual tax, of 8,000-10,000 CFA to the national government, and there is a monthly charge of 1,000 CFA per stall for night guards. Electricity is an additional cost. There are no income or sales taxes that the vendors have to pay. The vendors said that no special permit or licence is needed to sell ivory and that the government did nothing to monitor their stocks, thus there was no problem in adding new inventory.

One small street stall in front of the Akwa Palace Hotel sold ivory jewellery and trinkets (183 pieces, 1.9 kg), the only street stall seen in Douala that did so, except for a stall in front of the Ibis Hotel that had one poorly carved ivory elephant. No ivory was sold in the Akwa Palace Hotel. The street stall vendor said that French, Italian, Portuguese and Korean visitors were the main ivory buyers. He said that business was very variable, one month he might sell only a few pieces, the next a thousand. Sometimes a buyer would take everything on his table.

The Ibis Hotel had a moderate amount of ivory (60 pieces, 8 kg) while the Meridien Hotel shop carried 115 high quality pieces, including a model of an old Portuguese galleon and two exquisite female busts, the entire display weighing an estimated 40 kg. The Sawa Novotel had one boutique that displayed only ten old, coloured bracelets, the lot weighing about 1 kg. Trésor de l'Art Africain, a small boutique in Akwa, displayed 311 pieces weighing about 27.4 kg, and Couleur Exotique, a larger art boutique in Bonapriso, displayed small amounts of ivory made up of jewellery, plates of fruit, knife stands and trinkets totalling 54 pieces weighing 1.8 kg. The large Chez Ali Baba African art shop in Akwa carried no ivory.

Two workshops selling ivory items in Douala were eventually found in July, one by accident and the other by information provided by the Ibis Hotel saleswoman. Both had substantial amounts of worked ivory displayed and for sale. Both were named L'Art Africain, but are not related. The first was located on Avenue King Akwa not far from the Akwa Palace Hotel. It carried 663 finished pieces weighing approximately 110 kg, including a dozen carved tusks each under 5 kg in July. In November the number of pieces was down to 446, weighing approximately 57 kg, indicating a minimum turnover of about 53 kg in four months, or 13.25 kg a month. The actual turnover would be higher, however, as many pieces are manufactured in the workshop and sent straight out. The second workshop was on the Rue Koumassi in the Bali quarter and it displayed 826 pieces weighing about 85 kg. In November five more workshops were visited in the Akwa area. Three are located in a courtyard and a fourth not far away in the same general area as L'Art Africain. Together they displayed 1,340 pieces weighing approximately 108 kg.

The airport had eight table stalls near the Immigration control in July, four of which sold small ivory items totalling about 100 pieces weighing 2 kg. In November all but three of these table stalls had moved outside to the large hall next to the check-in area. The three remaining tables inside carried 30 tiny pieces weighing not more than 100 g, and the four tables that displayed ivory next to check-in had 42 pieces weighing not more than 2 kg.

In all, the investigator counted 4,891 pieces of worked ivory in Douala weighing a total of 510 kg being sold in 28 outlets. For types of items sold and their prices, see Tables 7 and 8. The average weight per piece was 104 g. For places revisited in November, the inventories made in July only are used here.

Allaway (1989) found 20 stalls selling ivory at the crafts centre, several more selling ivory at hotels, shops, street stalls and three workshops in the city centre, plus 12-15 stalls at the airport. In 1989 there must have been more than 50 ivory outlets in Douala, which Allaway estimated to have 880 kg of ivory. The number of outlets, including those in workshops, has thus decreased by 45%. Displayed ivory has also decreased by about 40% in the past ten years.

Table 7
Average retail prices for ivory items in Douala in June and July 1999.

Item	Size/description	Starting CFA price	Final CFA price*
Necklace	small beads	6-10,000	3,000
	large beads	7,500-25,000	5,000-10,000
	croissants	5-10,000	3,000
Bracelet	<1 cm width	3-6,000	1-2,000
	1-2.5 cm width	3-20,000	2-10,000
	>2.5 cm "	6-25,000	5-12,000
	Elephant hair with plaque	6,000	2,000
Earrings, pair		1-5,000	500-1,000
Ring	plain/carved	700-2,500	300-500
Animal	<5 cm	1-10,000	1,500
	5-10 cm	6-30,000	3-12,000
	10-20 cm	12-130,000	7-40,000
	20-30 cm	80-150,000	30-90,000
	30-40 cm	75,000-350,000	35,000-100,000
	30-40 cm (lobster)	80-90,000	40,000
	Human figure	<5 cm (busts)	8,000
	5-10 cm (busts)	20-35,000	6-15,000
	5-10 cm (profiles)	7,500-20,000	4-6,000
	10-20 cm (busts)	25-100,000	12-40,000
	10-20 cm (profiles)	7,500-32,250	4-9,000
	10-20 cm (figurines)	20-25,000	12-15,000
	20-30 cm (busts)	140-350,000	60-100,000
	20-30 cm (figurines)	35-120,000	12-35,000
	30-40 cm (figurines)	35-60,000	15-40,000
	>40 cm (figurines)	100-200,000	40-80,000
Carved tusk	<1 kg	15-30,000	9-15,000
	1-2 kg	75-340,000	30-90,000
	2-3 kg	170,000	80,000
hollow sections	3 kg	250,000	125,000
	5 kg	400,000	200,000
Polished tusk	3 kg	75,000	60,000
Lidded box	15 cm	25,000	10,000
Enamelled box	10 cm/diam	40,000	18,000
Fruit, 12 pcs	~5 cm each	15-35,000/set	12,000/set
Comb	<10 cm	8,000	2,500
	>10 cm	10-17,000	4-6,000
Hair clip		3-7,000	1-2,000
Belt	50 cm	15,000	10,000
Key chain		1,500-3,000	700
Chopsticks, pair		3,750-4,100	1,500
Pendant		1-5,000	500-1,000
Rose stem	30 cm, single	15-25,000	10,000
	30 cm, double	35,000	15,000
Lamp stand	25 cm	35,000	20,000
Name seal	6-8 cm, cylinder	10,000	3-4,000
	4x3 cm, rectangle	3,000	1,500
Galleon	50 cm, 2 masts	130,000	100,000
Paperknife	12-16 cm	5-15,000	2-5000

* Estimated.
N.B. US\$1=610 CFA.

Allaway (1989b) listed the prices for certain items in 1989, but unfortunately he combined Douala and Yaounde. This study found ivory prices in Yaounde today cheaper on the whole than in Douala. Table 8 compares Allaway's (1989b) list with comparable prices in Douala in 1999.

Table 8
Comparison of average retail prices for ivory items in Douala/Yaounde in June/July 1989 with June/July 1999.

Item	Size/description	June/July 1989 Starting US \$ price*	June/July 1999 Starting US \$ price
Necklace	large beads	32.40-48.40	12.30-41
Bracelet	<1 cm wide	12.60-14.50	4.90-9.80
	>2.5 cm	19.35-48.40	9.80-41
Earrings, pair		6.45-9.70	1.60-8.20
Animal	20-30 cm	194	131-246
Bust	10-20cm	113	41-164
Figurine	30-40 cm	226	57.40-98.40
Carved tusk	50cm (1-2 kg)	194	123-574

* Prices from Allaway, 1989, for comparison with this survey. N.B. Converted to US dollars at prevailing exchange rates.

There is overlap in the price ranges for most of the items, but if inflation is taken into consideration the prices are generally cheaper today. Such comparisons are difficult to make, however, as it is not known how comparable the items priced by Allaway are to the items priced in this study.

Ivory workshops in Douala

Seven workshops were found in Douala and these supply most of the worked ivory to the market, according to the workshop personnel. Informants were contradictory about the presence of additional workshops. Some said there were no others, others said that there were another six illegal workshops operating without licences that supplied certain shops in the Artisanat Central. These could not be visited because they were hidden. The first workshop on Avenue King Akwa had four craftsmen and two juvenile finishers working at the time of the first visit on large combs and a 2 kg bust. The total number of people employed there was ten. It is run by an Ivoirian who came to Cameroon more than 15 years ago in search of raw ivory for his father's carving workshop in Gagnoa. The second workshop in the Bali quarter employed six craftsmen and helpers. They were working on large tusk sections at the time of the visit. The craftsmen are mainly Guinean. The other workshops employed 2, 3, 3, 6, and 2 employees respectively. There was a total of 32 people seen working in the seven workshops.

L'Art Africain in Akwa said that they consume between 10 and 40 kg per month of raw ivory, depending on orders. No other workshop would provide any information about the quantity of ivory consumed. They did say, however, that the ivory came from various parts of Cameroon, from Gabon and from CAR. All workshops complained that ivory was getting harder to find, particularly the larger tusks used to make the better pieces. All craftsmen are paid by piece work, and many specialize in certain types of items. The specialists include those for bracelets, for necklace beads, for trinkets, and the more accomplished carvers who make busts, figurines, carved tusks, etc. One bracelet craftsman at the Akwa L'Art Africain workshop earned for his labour 125 CFA for *baguette* bracelets (<1 cm thick), 250 CFA for a >2.5 CFA round bracelet, and 1,250 CFA for a set of 7 thin bracelets. On an average day he could pass on to finishers 40 bracelets, earning an average of US \$3 00-400 a month if he worked full time.

The Akwa L'Art Africain in response to a question said that a Frenchman had ordered 1,000 of the 5 cm in diameter ivory disks seen in the Artisanat Central and in their display case. He also ordered 1,000 similar ebony disks. The craftsman did not know what the Frenchman did with them. The investigator also witnessed raw ivory being brought in, weighed, and paid for, and saw three 2-3 kg carved tusks being wrapped for air shipment to Italy. The carvings were crudely disguised by an outer layer of sun-dried earth decorated with small, thin disks resembling tiddly-winks. The selling prices of worked pieces in the two workshops were comparable to those found in the Artisanat Central.

The workshops sell much of their output to vendors at the Artisanat Central, but resident Europeans and Asians also buy it. Large quantities of worked ivory are sent by air and ship to Lagos and Abidjan and to Europe, and one Guinean trader takes ivory items to sell to private buyers in New York City. Americans apparently like the Nigerian FESTAC masks, and will pay \$2,000 for one. Two were seen being worked at one workshop. The second workshop singled out the French and Americans as big buyers. The first workshop, as it is near the Akwa Palace Hotel, gets a few walk-in tourists, but the others get none as they are in out-of-the-way places. All workshops said that business was slow, but only one was working substitute materials such as wood, bone or teeth. The decrease in local sales was due to a decrease in tourism, according to one informant.

Some workshops also carve ivory into fake antiques, which is a growing business.

Sources and prices of raw ivory in Douala

There was a good consensus amongst informants that 1-5 kg tusks sold for 17-18,000 CFA/kg to workshops (\$27-29/kg) and larger tusks sold for anywhere between \$30 and \$50/kg. Since none of the raw ivory is provided with documentation making it legal, vendors and craftsmen were reticent to provide details on how the ivory is brought to Douala or sent out, merely saying that it came in by road. One informant knew of an area in the east near the borders with Congo-Brazzaville and CAR where large tusks could be purchased directly from poachers at 10,000 CFA/kg (\$16.40), and in some cases could be obtained in barter for rifle ammunition. Many poachers now depend as much on the bush meat trade as on ivory, and an elephant's meat is worth more than its ivory.

One vendor said that the main ivory carving centres were in the north, in the Railbouba (sp?) quarter of Garoua, in Garoua-Boulai and in Kaélé, a small town south of the Dent de Midif mountain near the border with Chad. Ivory came in to those places from CAR, Congo-Brazzaville and Gabon by road, sometimes via Chad.

The price of raw ivory is currently on the rise due to shortages, particularly ivory sold to foreigners for export. Hausa middlemen sell ivory to foreigners at an average price of \$40/kg for medium (2-4 kg) tusks. Allaway (1989) reported that raw ivory sold in Douala for \$65-81/kg in May 1989, so the price has dropped by 39-50% over the past ten years, and more if inflation is taken into account.

Yaounde

Introduction

In Cameroon, the Yaounde survey was carried out from 3 to 6 July 1999. The only places found to sell ivory were the Centre Artisanal and the Hilton and Mont Fébé hotels. Several boutiques and jewellery stores were visited, but none sold old ivory.

Retail outlets and prices for worked ivory in Yaounde

The crafts centre is located in the city centre on the Place John Kennedy. It consists of 38 outlets of various size ranging from large independent shops through to small table stands. Thirteen outlets displayed ivory totalling 903 pieces and weighing approximately 119.8 kg, the small amount indicating that ivory is a relatively unimportant material to crafts vendors. Only one vendor, who controlled two adjacent tables, specialized in ivory (176 pieces, 39.4 kg). Five tables carried less than one kg of ivory. The largest African art shop, behind the main market place, displayed only two ivory pieces, a pair of intricately carved tusks 1.6 m long mounted in cast bronze and decorated with beads. The tusks had blowing holes carved into their sides and were said to be the ritual trumpets of a chief. The asking price was 12 million CFA, about \$19,600. The vendor said that documents could be provided that substantiated that the tusks were carved prior to 1989 and that therefore they could be exported with CITES certification. There was a much smaller range of items sold in the Yaounde crafts market than in the Douala one, though it produced two unique items. The first was a 12 cm high Bakota figurine, with a combination of human and bird features, and the second was a type of very slim, modernistic figurine 15-20 cm high. There was a relatively large number of carved and polished tusks, some of very small size (10 cm, ~0.1 kg). There were

also 'ancient' pieces carved on discoloured ivory, including smaller versions of the chiefs trumpets described above. The most common ivory items were necklaces and bracelets.

The vendors complained simultaneously of poor business and a lack of raw ivory. They certainly seemed desperate to sell ivory and some of the starting prices were very low. The vendors said that very little raw ivory was finding its way to the local market and that they thought that someone was buying it all up, but they did not know who. As in Douala, many of the vendors and stalls seemed to belong to a network of family members and it was common for several vendors to follow the investigator and give prices at tables that were different from the ones they worked at. Only one vendor provided information on the amount of ivory he had bought and sold over the past month: 5 kg for both. Since he was the man who specialized in ivory and he had two tables, it seems that the worked ivory trade in Yaounde is fairly moribund. He and other vendors said that business was much better before the CITES ban. Ivory sales had not changed over the past year. The few people who did buy ivory these days were said to be French, Russian and Chinese.

The Hilton Hotel carried 211 ivory pieces weighing an estimated 19 kg. There was a good selection of the various types of ivory items that could be found in the crafts centre, including jewellery, animals, human busts and figurines, carved tusks, vases with rose stems, slim stylized figurines, fruit pieces, paperknives, knife stands, etc. The saleswoman refused to answer any questions and was pointedly unco-operative. The Mont Fébé Hotel displayed only ten ivory pieces weighing about 5.2 kg. The saleswoman said that two pairs of about 1 kg carved tusks had been sitting there for five months. She said ivory moved very slowly and that they had not bought new stocks for four months.

The amount of ivory seen in Yaounde totalled 1,124 pieces weighing an estimated 144 kg with an average weight per piece of 118 g. Allaway (1989) reported that he found 12-15 stalls in the crafts market, several other outlets in jewellery and other stores, and two workshops in Yaounde displaying approximately 610 kg of ivory. Thus, the number of outlets has decreased from at least 22 in 1989 to 15 in 1999, and the amount of displayed ivory has decreased by about 76% over the past ten years.

Table 9 presents the range of prices for worked ivory seen at the crafts market. Prices at the luxury hotels were considerably higher. For example, large bead necklaces and 2.5 cm wide bracelets were 25,000 CFA at the Mont Fébé Hotel and 15-18,000 CFA at the Hilton. A pair of about 1 kg (35 cm) carved tusks was 120,000 CFA at the Mont Fébé and 1.2 kg (40 cm) carved tusks 140,000 CFA at the Hilton.

One small shop at the crafts market carried a pair of 'ancient' chiefs trumpets on carved tusks 40 cm long with a starting price of one million CFA. A similar larger pair 50 cm long started at 1.5 million CFA.

Ivory workshops in Yaounde

As elsewhere, vendors were very noncommittal about workshops, most claiming that none existed in Yaounde. One, the man who specialized in ivory, finally said that there was one place about 15 km out of town where three craftsmen worked when there was ivory. He said he would take the investigator there, but no one was currently working ivory and no stocks were kept there. He also said that there were about another three craftsmen who worked individually at home on occasion, if they had a commission. Another vendor said that his worked ivory came from Fouban in the north-west and produced the business card of a workshop there. Another group of vendors said that most of the worked ivory found in Yaounde originated in Bangui, CAR.

The investigator visited the WWF office in Yaounde and spoke to Dr Steve Gartlan, the country representative. He knew of no ivory workshops in Yaounde.

Sources and prices of raw ivory in Yaounde

The investigator entered into negotiations to buy raw ivory from a group of vendors who said that they would try and find some. They did not know how much might be available. The prices given were 18-20,000 CFA (\$29.50-32.80) for small (<1-2 kg) tusks, 23-25,000 CFA (\$37.70-41) for medium (2-9 kg) tusks, and up to 30,000 CFA (\$49.20) for large 10 kg and above tusks. They stated that >10 kg tusks were being held by individuals for better days, mainly farmers who had killed marauding elephants. The vendors said that the government did not sell ivory to craftsmen; all ivory had to

be obtained from villagers. They claimed elephants were not poached for their ivory, but that farmers or government personnel shot them to protect property and human life.

Table 9
Average retail prices for ivory items in Yaounde in June and July 1999.

Item	Size/description	Starting CFA price*	Final CFA price**
Necklace	small beads	3,000	3,000
	large beads	3,000-10,000	2,000-6,000
	rosaries	5-8,000	3,000
Bracelet	<1 cm width	1-2,500	700-1,000
	1-2.5 cm width	3-5,000	2-3,000
	>2.5 cm "	5-10,000	3-5,000
Earrings, pair		1-2,500	500-1,000
Ring	plain/carved	200-1,000	200-500
Animal	<5 cm	1,300-5,000	1-2,000
	5-10 cm	2,500-12,500	2-9,000
	10-20 cm	25-70,000	9-35,000
Human figure	5-10 cm (busts)	8-10,000	3-6,000
	5-10 cm (profiles)	4-6,000	2-3,000
	10-20 cm (busts)	15-60,000	10-20,000
	10-20 cm (profiles)	9,000	5,000
	10-20 cm (figurines)	18,000	10,000
	30-40 cm (figurines)	75-115,000	40-55,000
Bakota figurine	12 cm	25,000	7,000
Carved tusk	<1 kg	15-45,000	9-25,000
	1-2 kg	35-140,000	25-60,000
	2-3 kg	60-85,000	45-70,000
hollow sections	<1 kg	45,000	20,000
Polished tusk	<1 kg	20-25,000	10,000
	2-3 kg	40-75,000	30-50,000
	4-5 kg	120,000	80,000
Fruit, 12 pcs	~5 cm each	4,200-15,000/set	4-6,000/set
Comb	<10 cm	2,500	1,000
	>10 cm	4,000	2,500
Hair clip		700-2,500	500-1,000
Key chain		2,500-3,000	800
Chopsticks, pair		4,000	1,500
Rose stem	30 cm, single	17,500	12,000
Knife stand	set of 12	25-28,000	12,000
Paperknife	12-15 cm	1-12,000	1-3,000
Thin stylized figurine	10-15 cm	3-5,000	1,500-3,000
Disk	6x1 cm	5,000	2,000
Grape bunch	2kg	105,000	80,000

* The starting price excludes luxury hotels and the 'ancient' pieces.

** Estimated.

N.B. US \$1=601 CFA.

Curiously, no one talked of raw ivory coming to Yaounde from CAR and only a little from Gabon; nearly all references were made to Cameroonian ivory. This could mean that raw ivory from other countries bypassed the traders in Yaounde on their way to other destinations, or that the Yaounde traders were simply not willing to divulge any information to a stranger. Steve Gartlan of WWF (pers. comm., 1999) reported that diplomats at a certain European embassy in Yaounde were buying raw ivory for 15,000 CFA/kg (\$24.60/kg) to export to France, but with no corroboration this price must remain speculative. He also reported that a Spaniard had been caught with 800 kg of raw ivory seized at the Tiko Port in Douala destined for Rotterdam. TRAFFIC (1999) reported

that 576 kg of raw ivory from Cameroon in possession of a North Korean diplomat was seized at the Paris airport in late 1998. Karl Ammann (pers. comm., 1999) said that this ivory possibly originated from stocks held at the Yaounde Zoo. A North Korean diplomat from Equatorial Guinea was detained in Nairobi in 1999 after 690 kg of raw ivory were seized at the airport, destined for Beijing. The ivory originated in Cameroon and the North Korean admitted paying \$40/kg for it (E. Martin, pers. comm., 1999), consistent with the prices given by informants in Cameroon for this survey. There were rumours of other illegal raw ivory stocks belonging to foreign diplomats and petroleum workers still held in Cameroon. These foreign owned and illegally exported stocks could explain why there was such a shortage of raw ivory available to craftsmen in Yaounde.

References

- Allaway, J. (1989). The ivory trade in Cameroon. In *The Ivory Trade and the Future of the African Elephant*, Ivory Trade Review Group, CITES, Lausanne, Switzerland.
- Dublin, H., Milliken, T. and Barnes, R.F.W. (1995). *Four Years After the CITES Ban: illegal Killing of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.
- TRAFFIC (1999). Seizures and Prosecutions, *TRAFFIC Bulletin*, 17 (3), 119.

Nigeria

The legal position of the ivory trade in Nigeria

Laws relating to the ivory trade in Nigeria are very complex and ambiguous, as both federal and state legislation and decrees relate to various parts of it (Allaway 1989; Dublin et al., 1995). It appears that the internal trade in both raw and worked ivory is permitted as long as certain documentation is obtained from the relevant authorities and that the ivory originates from 'mature' elephants, though no definition is provided as to what constitutes a mature elephant. Mature elephants can be hunted under licence in northern Nigeria (Dublin et al., 1995). Nigeria was one of the first countries to join CITES in 1975.

Lagos

Introduction

The survey in Lagos was carried out from 9 to 16 July 1999. Ivory was openly displayed in a large crafts market, in hotel shops, in airport boutiques and in ivory workshops.

Retail outlets and prices for worked ivory in Lagos

The largest amount of ivory in Lagos is seen at the Ilasan Art Market, also called the Bar Beach Market, located at the Jakande Estate at least 20 km out of town on the variously called Lekki or Epe Expressway. It is well concealed and difficult to get to and from, thus few tourists ever visit it. Tourists buy ivory and other crafts from the luxury hotel shops.

The sprawling market consists of about 80 stalls, 16 of which sold ivory. Only about five of these specialized in ivory. There was a great variety of types of ivory items and the vendors said that most were carved locally, but that some came from the Côte d'Ivoire, CAR and DRC. A total of 3,681 pieces, estimated at 760 kg with an average weight per item of 207 g were seen, but not all ivory was displayed. Other ivory was kept in bags under counters. The investigator had several opened to be counted, but some vendors did not want to show the pieces after they suspected that the investigator was not a legitimate buyer. The largest stall carried 121 kg, several carried in the 30-60 kg range, and the smallest stall had 4.8 kg of ivory. Some pieces were quite large figurines or carved and polished tusks. The largest carved tusk weighed about 10 kg and was priced at \$1,000. A large carved elephant humerus bone was displayed in front of one stall. When asked who bought such items the vendors replied that anyone did — Chinese, Arabs, Europeans or Americans. Chinese working on the refurbishment of the railway were said to be big ivory buyers, and there were many shopping for ivory on the Sunday the investigator was present.

When asked, one vendor said that it would not be possible to estimate how much was earned from ivory in any set period as so many other items were sold and the accounts did not distinguish ivory from other items. In addition, several people in each stall were involved in selling crafts and vendors were very fluid in their comings and goings, thus determining income from ivory alone for individuals was not possible. Although most vendors were quite friendly and open, none would divulge information about quantities of worked ivory bought and sold. Many ivory vendors were Ibos from Onitsha, a few Hausa from Kano, some Yoruba, and a couple of Guineans.

All vendors asked said that ivory sales were slow and that they had decreased over the past year, perhaps due to the political instability and poor economic situation in Nigeria. With the new government they hoped things would pick up. Vendors said that ivory sales were much better before the CITES ban, and that ivory had been cheap and plentiful prior to 1989. Now it was scarce and expensive.

Three luxury hotels carried substantial amounts of ivory. The Eko Meridien crafts market located in front of the Meridien Hotel displayed the largest amount with the biggest pieces. Six table stalls out of a total of 18 exhibited ivory totalling 1,087 pieces, weighing an estimated 650 kg, with an average per piece of 598 g. One stall made up of two tables had 718 ivory pieces weighing about 297 kg, including a pair of polished tusks weighing at least 30 kg each priced at \$5,000 for the pair. Another table, carrying 1 10 pieces weighing approximately 155 kg, displayed a pair of 22.5 kg

tusks priced at \$2,500. This table, as the average weight per piece of 1.41 kg demonstrates, carried mainly busts, carved tusks and large figurines. The ivory vendors were all Hausa from northern Nigeria.

The Federal Palace Hotel sold no ivory in the boutique inside the hotel, but all six crafts shops outside carried ivory. The individual shops exhibited a variety of crafts items, but the vendors seemed more involved in changing money than in selling crafts. The six shops displayed 595 pieces of ivory weighing 136.5 kg, an average of 229 g per piece. The average weight of ivory of 22.75 kg per shop was very modest compared to the 108.3 kg average of the Eko Meridien stalls. Again, the vendors were all Hausa.

The Ikoyi Hotel crafts market, also in front of the hotel, carried only a relatively small amount of ivory. Only four stalls out of the 22 there displayed ivory, which totalled 290 pieces weighing about 87 kg, a 300 g average per piece. The vendors were all Hausa.

Many of the pieces in the hotel crafts shops were said to come from other countries such as CAR, DRC and C6te d'Ivoire. The hotel shops carried a type of item not seen in the Ilasan Art Market: sets of four to six musicians playing traditional Nigerian instruments. The musicians are sitting and their instruments and clothing are tinted different colours, though made of carved ivory. A set made up of musician statuettes measuring between 10-20 cm high sold for \$25-35 per piece, after bargaining. Larger sets with musicians measuring 20-30 cm high cost \$ 100-200 per piece after bargaining. These were manufactured in Nigeria.

The five ivory workshops visited displayed a total of 120 pieces weighing approximately 67.8 kg, with an average weight of 565 g. Figurines were by far the most common item being carved.

The three boutiques at the Murtalla Mohammed Airport displayed a total of 193 pieces weighing about 40.5 kg. Two of the boutiques carried a total of 20 polished tusks, the largest weighing 5 kg each, for a total of about 27 kg. In 1994 Dublin et al. (1995) found more than 100 kg of polished tusks displayed there, thus there has been a substantial reduction.

In all, the 40 outlets visited displayed some 5,966 pieces of ivory weighing about 1,742 kg (see Table 10 for the items and their prices). These are minimum numbers as many pieces remained hidden away in bags. The average weight per piece of 292 g was the highest of any of the cities surveyed in this study. The total weight of almost 1.8 tonnes signals an apparent increase in ivory seen for sale in Lagos since 1989 (Allaway, 1989) when 34 outlets displayed 1,081.5 kg of ivory, and in 1994 when Dublin et al. (1995) found only 500-700 kg of worked ivory in Lagos. It is possible the present investigator visited more existing outlets than those who did in the earlier studies (T. Milliken and N. Marshall, pers. comm., 2000).

Judging by business cards provided by vendors, Kano and Onitsha are northern and eastern regional centres of the ivory trade. One Hausa trader said that Kano had many ivory shops.

Table 10
Average retail prices for ivory items in Lagos in July 1999.

Item	Size/description	Starting US \$ price*	Final US \$ price**
Necklace	small beads	3-25	3-8
	large beads	8-35	8-15
	rosary	5-18	4-10
Bracelet	<1 cm width	4-15	2-4
	1-2.5 cm width	7-15	2-7
	>2.5 cm "	5-50	3-10
Earrings, pair		50-10	.50-2
Ring	plain/carved	1-4	.50-2
Animal	<5 cm	10-12	3-4
	5-10 cm	5-30	3-15
	5-10 cm (thin pairs)	12-30/pair	6-15/pair
	5-10 cm (wise monkeys)	100-350/set of 3-4	30-50/set of 3-4
	5-10cm (insects)	10-20	5-10
	10-20 cm	12.50-150	6-50
	10-20cm (thin pairs)	25-30/pair	12-15/pair

Table 10 continued

Item	Size/description	Starting US \$ price*	Final US \$ price**	
Human figure	20-30 cm	25-250	12-100	
	30-40 cm	70-380	40-150	
	30-40 cm (lobsters)	120	50	
	30-40 cm (crocodiles)	25-50	15-20	
	40-50 cm	450	150	
	<5 cm	30	5	
	5-10 cm (busts)	20-40	10-15	
	5-10 cm (profiles)	3.50-20	2-8	
	5-10 cm (FESTAC masks)	25-50	12-20	
	10-20 cm (busts)	25-150	10-50	
	10-20 cm (profiles)	7.50-25	5-8	
	10-20 cm (FESTAC masks)	28-95	12-35	
	10-20cm (figurines)	25-160	10-40	
	10-20 cm (musicians)	45-70	25-35	
	10-20 cm (infant Christ)	25	10	
	20-30 cm (busts)	40-280	25-180	
	20-30 cm (profiles)	32	15	
	20-30 cm (masks)	75-185	30-90	
	20-30 cm (figurines)	40-180	25-100	
	20-30 cm (musicians)	212.50-500	100-200	
	30-40 cm (busts)	175-500	100-200	
	30-40 cm (profiles)	52	25	
	30-40 cm (masks)	750	250	
	30-40 cm (figurines)	40-400	25-200	
	40-50 cm (figurines)	100-400	75-200	
	50-60 (figurines)	150-600	100-250	
60-70 cm (figurines)	1,000	300		
70-80 cm (figurines)	200-850	150-250		
Carved tusk	1.2 m (figurines)	300	200	
	<1kg	30-50	15-20	
	1-2 kg	50-300	40-100	
	2-3 kg	80-170	75-120	
	3-4 kg	400-700	150-250	
	4-5 kg	400-480	200-250	
	5-6 kg	700-1,000	250-300	
	6-7 kg	400	300	
	10-11 kg	700-1000	450-500	
	hollow sections	<1 kg	25-50	10-25
	1-2 kg	120-250	60-100	
	2-3 kg	250-260	100-110	
	Polished tusk	<1 kg	40-60	10-25
1-2 kg		75-90	45-75	
2-3 kg		82.50-200	80-120	
3-4 kg		250-275	125-160	
<i>Tche warra</i> (stylized antelope)	10-20 cm	5-12.50	2.50	
	20-30 cm	25	10	
Fruit, 12 pcs	~5 cm each	8-60/set	10-15/set	
	5-10 cm each	145-200/set	40-50/set	
	5-20 cm each	250-400/set	150-300/set	
Comb	<10 cm	1.20-4	1-2	
	>10 cm	6-20	3-8	
Hair clip		3-5	1-2	
Pendant		1.50-8	.50-2.50	
Chopsticks, pair		4	2	
Paperknife	12-15 cm	5-10	2-4	
Grapebunch	1.5kg	200	100	

Table 10 continued

Item	Size/description	Starting US \$ price*	Final US \$ price**
Lamp stand	12-15 cm	100-150	25-30
Cigarette holder		2-6	1-2
Fork & spoon	20 cm	15/pair	5/pair
Baton	40-50 c (.75-1 kg)	120-150	30-40
Walking stick	1.5 m (~2 kg)	90-150	75
Lidded box	5-8 cm	12-20	5-8
Name seal	6-8 cm, round & square***	6-15	2.50-3
Imitation tusk	20 cm	14	5
Pirogue (boat)		80	25

* Excludes 'ancient' pieces.

** Estimated.

*** Round and square name seals are used by Japanese, Koreans and Chinese under different circumstances such as for an individual or business, formal or casual, etc. (Milliken, pers. comm., 2000).

N.B. Converted from naira to US dollars at a rate of US \$1 = 100 N.

Using data provided in Allaway (1989) a comparison can be made for the prices between roughly comparable ivory items in July 1989 and July 1999 (Table 11). The exchange rate used is 10.5 N to the US dollar in 1989 and 100 N to the US dollar in 1999.

Table 11
Comparison of average retail prices for ivory items in Lagos in July 1989 with July 1999.

Item	Size/description July 1989	July 1999 Starting US \$ price*	Starting US \$ price
Necklace	large beads	20.95	8-35
Bracelet	<1 cm wide	11.40	4-15
	>2.5 cm	28.60	5-50
Earrings, pair	2.90-5.70	.50-10	
Human figure	10-20 cm	210	25-150
	30-40 cm	476	40-400

* Prices from Allaway, 1989, for comparison with this survey. N.B. Converted to US dollars at prevailing exchange rates.

There are overlapping prices for all of the smaller items, but the larger human figures (busts, figurines) are cheaper today than in 1989.

Ivory workshops in Lagos

As in the Central African cities, most vendors pretended to know nothing about ivory workshops. A vendor from the Ilasan Art Market encountered by chance in the National Museum agreed to guide the investigator to the five main ivory workshops on Lagos Island. These five workshops supply most of the locally made worked ivory to the Ilasan market. Four of the workshops were staffed primarily with craftsmen from Guinea and Mali while one was made up of Ibos from Onitsha in the east of the country. Two workshops are located in Sandgrouse Market while the others are within walking distance of each other, north of Tafawa Balewa Square.

The number of craftsmen in the five workshops was 10, 4, 3, 11, and 5 respectively, giving a total of 33. Not all of these craftsmen are working at any one time as there are periodic shortages of ivory, a lack of commissioned pieces, or a craftsman may be away hawking his finished pieces. There are some independent craftsmen who periodically rent the tools and premises of a workshop to manufacture pieces, then leave to go and sell them, but the number of these independent craftsmen was not possible to estimate. All the workshops were working only ivory, but one displayed a carved elephant humerus bone similar to that seen in the Ilasan market. One workshop was the source of the unusual 8-12 cm insects, etc. (bees, mosquitoes, scorpions, etc.) seen in the Ilasan market, but which were not in the hotels.

Only one workshop agreed to reveal ivory consumption figures, saying it consumed on average 50 kg a month. This was the workshop employing ten craftsmen. It is tempting to extrapolate the average figure of 5 kg a month per craftsman to the total of 33 craftsmen, yielding a total consumption of 165 kg a month, but a sample of one workshop is too small to conclude anything.

The fact that certain ivory items are seen either only in the Ilasan market or in the hotels suggests different manufacturing origins. This suggestion is bolstered by the statement of a vendor in the Eko Meridien Hotel who said that his worked ivory came from a workshop in Mafoluku, a suburb to the north of Ikeja, which he said employed about ten craftsmen. The vendor said it was too far away to take the investigator, and he did not know the names of the streets to provide directions. He knew of no other workshops, and none of the other vendors in the hotel crafts market admitted to knowing of any. They all said they bought their ivory from traders who came to them.

All the craftsmen in the workshops work independently; they earn no salaries and make their money from commissioned work only. As in all the other workshops visited in the course of this study, one man is the proprietor and organizes access from the others to pay for rent, utilities, fees, etc. Many times a Nigerian trader will bring tusks to be carved into certain items and a labour charge will be assessed. For example, a hunter figurine 40 cm high might take two weeks to complete with one carver and one finisher working on it. The charge would be 6,000 naira, or \$60, according to a craftsman informant. Most of the buyers were Nigerian traders, as the location of the workshops was kept a secret from resident foreigners by agreement with the vendors, but some Chinese railway repair workers came to buy.

The craftsmen said that business was not bad, but that the scarcity of raw ivory and price increases were hurting them. They blamed the civil war in DRC as the cause of the ivory shortage. Three of the workshops were not present in 1989, but two of them said that business was about the same now as prior to the ban.

Sources and prices of raw ivory in Lagos

None of the ivory worked in Nigeria originates in the country, according to most informants, though one Hausa vendor at the Federal Palace Hotel crafts market said that some ivory came from elephants killed in northern Nigeria. Three countries repeatedly were named by informants as sources of raw ivory: DRC, CAR and Cameroon. The Ibo owned workshop said that all their ivory came from Cameroon via Calabar, where it was taken by boat to Lagos. Gabon was much more rarely named as a source, and one vendor said that ivory even came by plane from Mozambique. Maiduguri and Kano were repeatedly mentioned as cities through which ivory passed from Central Africa on its way to Lagos.

There was a uniform consensus amongst vendors and craftsmen that raw ivory cost \$50/kg for any useable size. Only one vendor in the Ilasan market gave lower prices, and these were \$48/kg for large tusks and \$46/kg for medium tusks. A year ago the price was \$30/kg, according to informants, and the rapid rise in price was attributed to a shortage caused by the war in DRC. The investigator expressed interest in buying as much raw ivory as the craftsmen could provide and the largest amount offered was only 50 kg, indicating that ivory is indeed very scarce in Lagos.

According to Allaway (1989), raw ivory cost \$14-29/kg in Lagos in 1989 and Dublin et al. (1995) put the price at \$23-26/kg in 1994 in Maiduguri. The Lagos price is not given, but presumably it would have been higher, consistent with the \$30/kg cited by informants for 1998. The recent increase in the price of ivory following a long period of relative stability suggests that the supply and demand ratio for ivory remained fairly steady from 1989 to 1998, but suddenly has fallen out of equilibrium due either to a rapid decrease in supply or increase in demand. According to informants, it is the former.

References

- Allaway, J. (1989). The ivory trade in Nigeria. In *The Ivory Trade and Future of the African Elephant*, Ivory Trade Review Group, CITES, Lausanne, Switzerland.
- Dublin, H., Milliken, T. and Barnes, R.F.W. (1995). *Four Years After the CITES Ban: Illegal Killing of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.

Côte D'ivoire

The legal position of the ivory trade in Côte d'Ivoire

There is a ban on hunting elephants in Côte d'Ivoire, and on 7 March 1997 the government banned all domestic trade in ivory tusks and called for strict controls on the smuggling of tusks into and out of the country (TRAFFIC, 1997). However, it is legal to possess and sell worked ivory in the country. Côte d'Ivoire joined CITES in 1994.

Abidjan

Introduction

Work was carried out in Abidjan from 17 to 24 July and 30 July 1999. Worked ivory is found in many parts of Abidjan: at the markets on the Plateau, in Cocody and in Zone 4, in shops in the Koumassi suburb, at luxury hotels, and at ivory workshops located in Abobo, Treichville and Koumassi. Only a tiny amount of ivory was seen in the international airport duty free area.

Retail outlets and prices for worked ivory in Abidjan

The Plateau market in the city centre is made up of a variety of shops selling vegetables, dry goods, shoes and clothing, electronic wares and crafts. Ten of the crafts stalls were found selling worked ivory, none of them particularly important in size. The largest carried 250 pieces weighing about 19 kg consisting of the usual jewellery, animals, busts, figurines, etc. and five of the shops displayed only 5-7 cm ivory plaques (animals, face profiles) mounted on coloured backgrounds in glass covered frames to hang on walls. The total ivory seen in this market amounted to 631 pieces weighing approximately 47 kg.

The largest place to find worked ivory, not only in Abidjan but in West and Central Africa, is the Cocody Market not far from the Hôtel Ivoire. The two-storied market building contains shops, stalls and tables selling cooked food, meat, vegetables, clothing, crafts, etc. on the ground floor and crafts, African textiles and jewellery boutiques on the first floor. Four stalls sell small amounts of ivory on the ground floor while nine sell ivory on the first floor. In addition, seven crafts stalls sell ivory out in front of the market. The 20 outlets displayed a total of 10,871 pieces weighing an estimated 1,375 kg. Some of the stalls on the first floor carried numerous very large and ornate pieces priced in the thousands of US dollars. One pair of 20 kg carved tusks was priced at 6 million CFA (\$9,836). The largest table stall carried 1,754 pieces weighing approximately 265 kg, while a nearby shop enclosed in glass panes displayed 1,528 pieces of ivory weighing an estimated 283 kg.

The Centre Artisanal de la Ville d'Abidjan is a relatively new development located in Zone 4, far from any tourist areas. It is made up of about 30 nicely constructed shops displaying the usual crafts items. There were no shoppers there at the time of the investigator's visit and the reason for building such a crafts centre in that area is not apparent. Only four of the shops sold ivory, and only one carried a substantial amount, some 483 items weighing an estimated 54 kg. The total for the centre was 555 items weighing a bit over 56 kg. The vendor in the largest ivory shop said that business was not good and he was thinking of moving out.

The Hôtel Ivoire displayed no ivory in its large Rose Ivoire basement art shop, but the boutique in the lobby carried 87 fine pieces of jewellery, animals and busts weighing about 9 kg. One very nice bust had the name 'Asimbo' carved on it, the name of one of the Kinshasa master carvers. None of the pieces was very large. The Ibis Hotel on the Plateau displayed 57 pieces weighing approximately 0.6 kg. The Novotel has closed and the Sofitel was undergoing renovations and its shops were all closed. Two African art boutiques on the Rue du Commerce, just off the Plateau, were visited. One, called the Galeria Akagni, exhibited three small pieces of carved old ivory art pieces weighing about 150 g. The other, Ivoire Sculpture, displayed four rosaries weighing about 400 g total. None of the shops and boutiques on the Plateau, outside the market, were found to carry ivory.

Twelve ivory shops are found in the Koumassi quarter opposite the Commissariat of the 6th Arrondissement. Six ivory workshops are associated with all but two of these retail outlets, either in a back room of the shop or in an open courtyard area behind. The largest shop displayed 1,665

pieces weighing an estimated 385 kg, the largest amount of any single outlet in Abidjan. The next largest carried 820 pieces weighing about 264 kg. Some of these shops displayed a tremendous variety of items, including ornate boxes held up by elders in village scenes, St. George on a horse slaying a dragon, women in active dance poses and other unusual styles. The total number of pieces counted in the 12 shops was 7,185 weighing an estimated 1,150 kg.

Only two workshops selling worked ivory were found in Treichville, one with a moderate 502 pieces weighing 82 kg and the other with an insignificant nine pieces weighing 0.5 kg. The Abobo quarter north of Adjamé accommodates four ivory workshops, three of which had small amounts of worked ivory for sale ranging from about 6 to 12 kg in each. The total number of finished pieces seen was 199 weighing about 27 kg. Another approximately 10 kg was being worked on.

One small jewellery stall in the duty free section of the Abidjan Airport displayed five small ivory pendants and six earring pairs weighing around 20 g total.

In all, the 52 outlets where worked ivory was available retail carried some 20,114 pieces weighing approximately 2,748 kg with an average 137 g per piece weight. This compares with Friedlein and Hykle's (1989) finding that there were 56 to 61 outlets in Abidjan selling 4,880 kg of ivory raw material input in 1989. In mid-1994 Dublin et al. (1995) found about 10,000 worked ivory pieces weighing an estimated 1,750 kg in Abidjan. Apparently, there was a sharp drop in worked ivory sales after the CITES ban up to the mid-1990s, with a significant recovery in the market since then, though possible sampling variability among the three studies must be taken into consideration.

Most of the ivory vendors in the markets were Senegalese, Burkinabes or Malians, with lesser numbers of Ivoirians and Guineans. The overall impression of the state of the retail market obtained from vendors was that business was satisfactory and that no discernible decrease had been experienced recently. Many complained that business was slow, but that is the perpetual complaint of any merchant. The Cocody Market in particular was full of foreign resident and tourist shoppers, and several of European and Asian origin were seen by the investigator to shop for ivory. The Cocody Market and the Koumassi shop-workshop complex form the major centres for the ivory trade in Abidjan.

No useful information could be obtained from the vendors concerning quantities of ivory bought and sold, earnings, who the main buyers were and so on. The vendors did not seem desperate for business and therefore were quick to dismiss the investigator when questions diverging from buying their wares commenced. This is a significant contrast to the other cities visited and it suggests that the ivory market is stronger here than elsewhere.

The retail prices of worked ivory in Abidjan were not significantly higher than prices of items seen in Lagos, the other main ivory market with a raw ivory deficit, in spite of the fact that raw ivory prices are higher in Abidjan. Fierce competition must act to keep profit margins lower. Table 12 presents the range of starting and final prices for worked ivory in Abidjan, excluding art pieces and ivory items at the Hôtel Ivoire, where prices were higher. For example, the 18 cm, 1 kg Asimbo bust in the hotel was priced at 180,000 CFA, small bead necklaces were 28-30,000 CFA, earrings were priced up to 55,000 CFA a pair, and a 3 cm wide decorated bracelet cost 98,000 CFA.

Table 12
Average retail prices for ivory items in Abidjan in July 1999.

Item*	Size/description	Starting CFA price	Final CFA price**
Necklace	small beads	6,000-10,000	4,000
	large beads	6,500-30,000	6,000
	rosaries	12,000-15,000	5,000
Bracelet	<1 cm width	3,000-6,000	1,000
	<1 cm (set of 7)	22,000-30,000	7,000
	1-2.5 cm width	6,000-15,000	2,500-5,000
	>2.5 cm "	9,000-30,000	3,000-7,000
Ring	1,000-3,000	500-1,000	
Earrings, pair	4,000-4,500	500-1,500	

Table 12 continued

Item*	Size/description	Starting CFA price	Final CFA price**
Animal	<5 cm	3,000	1,000
	3-7cm (set of 5)	25,000-30,000	10,000-12,000
	5-10 cm	10,000-25,000	5,000-10,000
	5-10 cm (thin)	6,000-15,000	2,000-5,000
	10-20 cm	20,000-125,000	8,000-40,000
	10-20 cm (thin)	10,000-17,500	6,000-7,000
	20-30 cm	20,000-125,000	9,000-50,000
	30-40 cm	90,000-160,000	30,000-60,000
	40-50 cm	150,000-600,000	50,000-180,000
	40-50 cm (crocodiles)	30,000	12,000
	40-50 cm (lobsters)	45,000	30,000
Bust	<5 cm	7,000	2,000
	5-10 cm	10,000-45,000	4,000-15,000
	10-20 cm	15,000-125,000	10,000-50,000
	20-30 cm	75,000-300,000	40,000-90,000
	30-40 cm	350,000	125,000
	40-55 cm	125,000-1 million	100,000-300,000
Figurine	5-10 cm	35,000	10,000
	10-20 cm	18,000-75,000	10,000-24,000
	20-30 cm	35,000-70,000	20,000-30,000
	30-40 cm	65,000-150,000	30,000-70,000
	40-50 cm	100,000-250,000	40,000-100,000
	50-60cm	60,000-150,000	40,000-110,000
	60-70 cm	75,000-600,000	50,000-240,000
Mask/profile	5-10 cm	7,500-10,000	3,000
	10-20 cm	7,500-25,000	5,000-9,000
Carved tusk	<1 kg	14,000-50,000	<40,000
	1-2 kg	35,000-150,000	20,000-60,000
	2-3 kg	140,000-200,000	60,000-90,000
	3-4 kg	190,000-250,000	90,000-120,000
	4-5 kg	125,000-350,000	120,000-180,000
	5-6 kg	500,000	200,000
	20 kg	3 million	1 million
	hollow sections	10-20 cm	10,000-25,000
20-30 cm		30,000-50,000	12,000-25,000
40-50 cm		150,000	50,000
Polished tusk	1-2 kg	50,000-200,000	25,000-50,000
	2-3 kg	150,000-250,000	50,000-80,000
	3-4 kg	200,000	90,000
	15-16 kg	1.75 million	600,000
St. George & the dragon Tche warra (stylized antelope head)	30 cm	100,000	60,000
	10-20 cm	12,000	6,000
	20-30 cm	25,000	12,000
	30-40 cm	30,000	18,000
Lidded box	5-10 cm	12,000	7,000
	>10 cm	25,000	12,000
Pendant	2-6 cm	600-3,000	500-1,000
	7-10 cm	2,000-6,000	1000-2,000

Table 12 continued

Item*	Size/description	Starting CFA price	Final CFA price**
Fruit, 7-17 pcs	3-8 cm each	2,188-10,000 each	600-2,000 each
	4-12 cm each	4,000-16,667 each	2,000-12,000 each
	4-20cm each	16,667-20,833 each	10,000-15,000 each
Pineapple	12 cm, .3 kg	40,000	25,000
Grape bunch	.4 -.6 kg	50,000-60,000	25,000-30,000
Palm nut bunch	40 cm, 1.2 kg	125,000	50,000
Paperknife	12-22 cm	6,000-17,000	3,000-10,000
Comb	<10 cm	3,500	1,200-2,000
	>10 cm	15,000-18,000	6,000-9,000
Hairpin	12cm	3,000	1,500
Hair clip		4,000	1,000-2,000
Knife stand		3,000	1,200
Key chain		1,500	1,000
Chess set (ivory & ebony)	5-7 cm	150,000-250,000	60,000
Spoon & fork	15cm	7,500	3,000
Chopsticks, pair		4,000-5,000/pair	2,000/pair
Name seal	6-8 cm	6,000-8,000	2,500-3,000
Pen holder		2,000	1,000
Cigarette holder		2,000-3,000	1,000
Baton	1.5 m	60,000	30,000
Walking stick	30 cm	30,000	12,000
Razor		8,000-12,000	6,000
Lamp stand	50 cm	50,000	24,000

* Excludes art pieces and all items at the Hôtel Ivoire.

** Estimated.

N.B. US\$1=610 CFA.

Ivory workshops in Abidjan

Ivory workshops were found in three suburbs of Abidjan: Treichville, Abobo and Koumassi. A single workshop was said to be in Zone 4, producing the ivory for the largest shop in the Centre Artisanal de la Ville d'Abidjan in Zone 4, but it was not visited in the course of this study as the vendor refused to accompany the investigator there. In addition, vendors said that there were ivory workshops in Dimbokro, a town some 200 km north of Abidjan, and an Ivoirian encountered in Douala said that there were four ivory workshops in Gagnoa.

Two ivory workshops are located near the Senegalese Mosque in Treichville. One is quite active and employed ten craftsmen. Most of them were working ebony at the time of the visit, and the only ivory items being made were rings and bracelets. The second workshop was very small and employed only three craftsmen. One carver was making cow bone pendants at the time of the visit and the other was working ebony. The craftsmen at both workshops said that raw ivory was currently very scarce and the smaller workshop had no raw ivory in stock. Most of the craftsmen were Guinean with some from Mali and Côte d'Ivoire. The main buyers were crafts vendors from the Plateau and Cocody markets and Senegalese traders who took worked ivory to Dakar. Tourists used to come occasionally, but since the nearby Treichville Market burned down, they no longer do. The ivory business had decreased from a year ago due to the current raw ivory scarcity and the burning of the market. One vendor said that the ivory carving industry was much bigger in 1989 than now.

Four ivory workshops were visited in Abobo. The workshops employed 12, 7, 1 and 15-20 craftsmen respectively giving a total of 35-40 craftsmen, plus a number of children and adolescents who wash and polish pieces. The craftsmen are almost all from Guinea, with a few from Mali, Burkina Faso and Côte d'Ivoire. Most work was being done on cow bone, pig and hippo teeth and wood at the time of the visit, with about four craftsmen actively working ivory. None of the workshops had large raw or worked ivory stocks. The workshop with one carver had about 15 kg

of raw ivory in the form of cut sections of large tusks, but he was not working it as he was waiting for a commission. He was working pig tusks at the time of the visit. The largest amount of raw ivory offered to the investigator when he expressed an interest in buying was 100 kg. Most of the finished pieces were taken by the craftsmen to be sold in the ivory shops in Koumassr.

Sometimes Japanese, French or Lebanese residents will order certain pieces to be made, or buy finished pieces on hand from Abobo workshops. Japanese technical assistance workers and diplomats, even the ambassador, were said to be big buyers of ivory and paid well. A Japanese art gallery owner from Tokyo was said to come every 6-8 months to buy African art and *balafons* (a type of wooden xylophone) in large quantity, and he would also buy ivory on these trips. Another Japanese art boutique owner based in France came annually to buy worked ivory.

All the craftsmen complained about a raw ivory scarcity and rising prices. One craftsman was particularly bitter about the ivory ban 'the Whites' had inflicted on them, saying that it was keeping hundreds of African families poor. Prior to the CITES ban the ivory trade had been booming and craftsmen could afford to feed and educate their families. Now, many people had left the trade and the remaining craftsmen were forced to work on bone and pig teeth because not as many people bought elephant ivory anymore.

Five of the 12 ivory shops in Koumassi had their own workshop in a back room. These workshops employed on average four craftsmen each. Three of the shops shared a large workshop in a rear courtyard that employed about 24 craftsmen, making a total of 44 craftsmen in the six Koumassi workshops, though this number varied due to multiple factors. Most of the craftsmen in the courtyard workshop were working wood, with a few carving bone and pig teeth. Craftsmen in the back room workshops were using mainly ivory. One had several large bags lying on the floor behind a counter which contained about 40 whole tusks from what appeared to be 2-5 kg each, perhaps 100-120 kg in all. No one would admit where the ivory came from.

The Koumassi workshops sell much of their ivory in resident showrooms, and they are the principal suppliers to the Cocody and Plateau markets and hotels. In addition, foreign residents and tourists buy many items, as do ivory traders from other West African countries, mainly Senegalese and Nigerians. French, Italians and Spaniards were said to be the most common buyers. One of the vendors in a Koumassi shop said that Chinese bought the larger polished tusks, no doubt to export to China or Taiwan. None of the craftsmen would divulge how much ivory they consumed, but they did say that it was less compared with a year ago, and much less than ten years ago. They said that raw ivory could still be obtained, but that shipments came in more infrequently now and that prices were rising.

Dublin and Jachmann (1992) state that prior to the CITES ivory ban there were 25 ivory workshops in Abidjan, but that 10 to 15 of them had closed by 1991. Friedlein and Hykle (1989) mention only 12 ivory workshops in Abidjan in 1989, thus the 12 and probable 13 workshops seen in 1999 cannot be interpreted as either a decrease in workshops or a stable situation from 1989.

Dublin et al. (1995) assert that there were about 178 people working as ivory craftsmen and vendors in Abidjan in 1990 and that this number had declined to 38 by mid-1994. (They found 255 ivory craftsmen and vendors in 1990 and 55 in mid-1994 in seven Ivoirian cities, with 70% of them in Abidjan.) Although vendors as such were not counted in this study, a minimum of two per non-workshop outlet can be proposed. If the 107 probable craftsmen are added to 88 minimum vendors at the 44 non-workshop retail outlets, it makes a total of a minimum of 195 people directly involved in the production and selling of worked ivory in Abidjan. This does not include the high number of ivory finishers, usually children, and independent craftsmen and hawkers. If these numbers have any validity, they support the pattern seen with retail worked ivory sales of a rapid slump in the market between 1989 and 1994, followed by a resurgence in the ivory market to the level seen today. There would appear to be less ivory consumed today than in 1989, but more people are involved in the industry. This may be a deceptive conclusion, however, as many of these people are only working ivory part-time.

Sources and prices of raw ivory in Abidjan

Most raw ivory is said to be trucked in from Central Africa, though informants did not know the exact routes. The name and location of the godown in Treichville of a Gambian ivory importer was given to the investigator, and a truck load of raw ivory had just arrived at the time of the visit. The

ivory originates in DRC, CAR and Cameroon. No other sources were given by the craftsmen and vendor informants, but they might not always know from where the ivory is coming. There are still small amounts of rose ivory from within Côte d'Ivoire coming onto the market, which fetches the highest price.

The lowest price quoted for raw ivory tusks 1-5 kg bought by workshops was 25,000 CFA/kg (\$41). Other informants gave prices up to 28,000 CFA/kg (\$45.90). If the ivory was the rose variety, the price went up to a stated 50,000 CFA/kg (\$82), but the investigator negotiated a price of 40,000 CFA/kg (\$65.60) for a pair of 8 kg rose ivory tusks. Tusks more than 10 kg were said to cost 50,000 CFA/kg, but they are extremely rare these days.

Dublin and Jachmann (1992) cite a price for raw ivory from the first to second middleman (i.e. craftsman) before the ban of \$231 to \$264/kg, dropping to \$99-\$132/kg by 1991 for small to medium tusks. The pre-1990 prices seem inflated, but if correct the price of small to medium raw ivory tusks has therefore declined by some 75-82% since the ban.

References

- Dublin, H. and Jachmann, H. (1992). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Six Range States in Africa*. WWF, Gland, Switzerland.
- Dublin, H., Milliken, T. and Barnes, R. (1995). *Four Years After the CITES Ban: illegal Killing of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.
- Friedlein, T. and Hykle, D. (1989). Intra-African ivory trade study. An assessment of Côte d'Ivoire's ivory trade, Doc. 7.22, Annex 1, *Proceedings of the 7th Conference of the Parties*, CITES Secretariat, Lausanne, Switzerland.
- TRAFFIC (1997). Côte d'Ivoire ivory trade ban, *TRAFFIC Bulletin*, 17(1), 1.

Daniel Stilies



It is illegal to sell ivory in Gabon, but vendors in the crafts markets in Libreville will bring out hidden pieces if a buyer asks for it.

Daniel Stilies



Worked ivory demand in Bangui, CAR, is very low. The Mbororo bust being held on the left was the largest seen in the city. The starting price was 350,000 CFA, about \$ 580, which means that the final price would be nearer \$ 300.

Daniel Stilies



A bracelet specialist can earn between \$ 300 and \$ 400 a month in Douala, Cameroon.



In August 1999, a North Korean diplomat in West Africa attempted to transport 690 kg of raw ivory from Cameroon to China, but his shipment in 12 metal boxes was intercepted in Nairobi by Customs officials.



In addition to ivory souvenirs, traders in Djibouti offered for sale 59 leopard skins in June 1999, most of which were illegally imported from Somalia and Ethiopia.



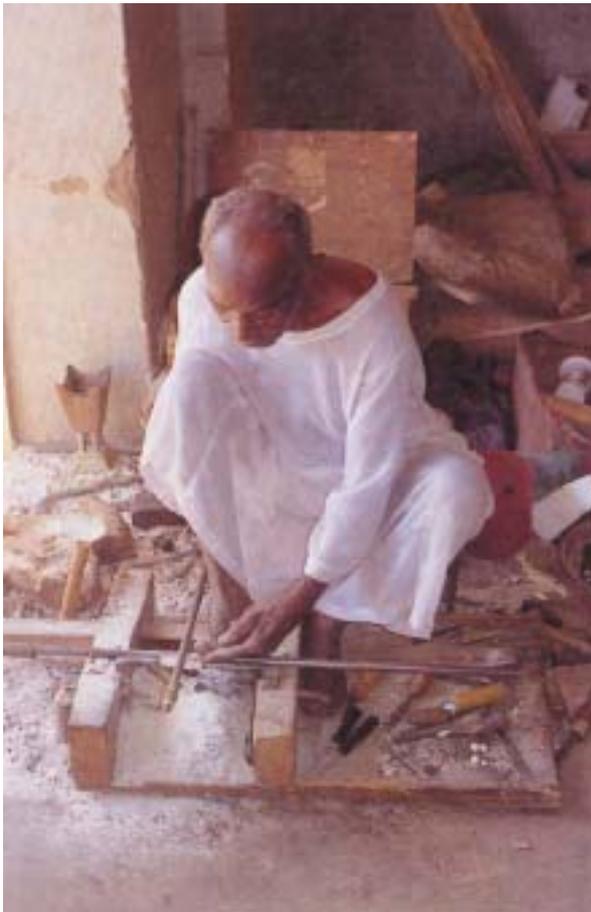
Ivory figurines of traditional musicians were seen only in the hotel crafts markets in Lagos, Nigeria.

Esmond Martin



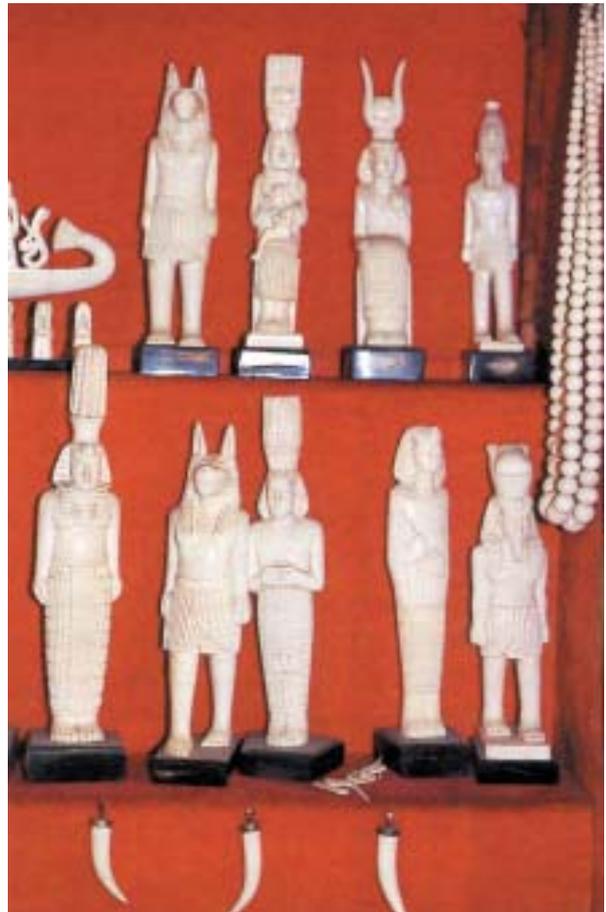
There are no ivory craftsmen in Djibouti, but there are several hundred ivory items for sale, which come from neighbouring Ethiopia and Somalia.

Esmond Martin



In Omdurman in Sudan, hand tools are still being used to make ivory items, a tradition that dates back hundreds of years.

Esmond Martin



Ivory figurines of Pharaohs and their queens are still being made in Cairo to sell to tourist, despite the fact that the trade in ivory is prohibited in Egypt.

Esmond Martin



Tourists from Spain, France and Italy are the main buyers of ivory souvenirs in the hotel shops of Cairo, Egypt.

Esmond Martin



Patrick Mavros, who works in his studio located just outside Harare in Zimbabwe, makes some finest quality ivory carvings of African wild animals.

Esmond Martin



Maputo in Mozambique is one of the few large cities in Africa where ivory is often displayed for sale on the pavements.

Senegal

The legal position of the ivory trade in Senegal

Worked ivory is legally sold in Senegal, but elephant hunting is illegal. Senegal joined CITES in 1977. This was the only country in which informants claimed that the import of raw ivory is more strictly controlled than elsewhere in the region. Informants said that control over the export of worked ivory was more lax, however.

Dakar

Introduction

The survey was carried out in Dakar from 25 to 29 July 1999. The main outlet for worked ivory is at the Village Artisanal de Soumbédioune out of the city centre in the direction of the international airport. Ivory is also sold near the Kermel Market and at shops, boutiques and hotels in the city. No ivory is sold at the airport.

Retail outlets and prices for worked ivory in Dakar

The Village Artisanal de Soumbédioune contains about 50 crafts and jewellery shops, 20 of which sold ivory. The vendors here were the most unco-operative of any encountered in this survey and it was very difficult to obtain any information. Only two of the shops displayed over 70 kg of ivory and five carried 5 kg or less. Five of the shops were jewellery boutiques that exhibited about 300 rings, pendants and bracelets weighing not more than 2 kg in all. The total number of pieces counted in these 20 outlets was 3,176 weighing an estimated 311.5 kg for an average weight per piece of 98 g.

The range of items was similar to that seen in the other cities, but there were no new or unusual types. The large pieces seen in Abidjan and Lagos were also lacking. The heaviest carved or polished tusk did not exceed 5 kg, and there was only one thin figurine taller than 50 cm. Many of the worked pieces were imported from Côte d'Ivoire and there were Portuguese galleons of the type seen only in the Meridien Hotel in Douala and lobsters (*langoustes*) that were manufactured either in Cameroon or DRC (Kinshasa). Almost every ivory shop and many of the other crafts shops carried worked pig and hippo teeth, mostly the former.

The vendors refused to answer any questions about who the main buyers of ivory were, but just looking at the shoppers showed them to be mainly European tourists or business people. Questions concerning sources and consumption of ivory also went unanswered. Dakar had the highest retail prices for ivory encountered in West and Central Africa, thus it is unlikely that traders of any kind would come here to buy. Vendors gave no clear indication about whether business was better or worse now than last year.

There were about 40 crafts stalls lining two streets next to the Kermel Market in the city centre.

Only two of these were found to display ivory. The larger, which specialized in ivory, carried 252 pieces weighing approximately 28 kg and the smaller, which displayed other crafts as well, had 289 smaller items weighing a little over 9 kg. The second stall displayed a pair of polished tusks not more than 10 cm long, which must have been taken from a very young elephant. The vendor of the first stall said that ivory was hard to find, defending his high prices. He also revealed that business was worse than a year ago. Many of the stalls displayed worked pig teeth, which supports the contention that ivory was scarce. The Galerie Boofta, located across the street from the Kermel Market, displayed 249 mainly smaller pieces of ivory weighing an estimated 10.8 kg. One polished and two carved tusks displayed were each under 1 kg in weight.

Also in the city centre, the Rue Mohammed V is lined with about a dozen large North African crafts and clothing shops and five smaller African art shops. One of the African art shops carried ivory, only six pieces made up of busts, figurines and a pair of <1 kg polished tusks, totalling about 3.5 kg in all. Nearby on the Avenue Pompidou next to the Hôtel de l'Indépendance the Galerie Orientale art boutique was found to display 205 ivory pieces weighing approximately 24 kg. Many of the pieces were imported from China and were various sized 'Confucius' figurines and *boules de Canton*, elsewhere called magic balls, which consist of an ornate ball perched on a

sculpted pedestal. The balls each contain seven other intricately carved smaller balls, one inside the other. There were also Buddhas, busts and figurines carved in Africa. About two kilometres along Avenue Pompidou a small street stall carried six ivory necklaces and four ivory bracelets.

The Galerie Antenna art boutique on the Rue Félix Faure displayed pieces only crafted in Abidjan or Douala, according to the French proprietor, as he thought Senegalese carving of inferior quality. The 105 ivory pieces exhibited there were of high quality, but with equally high prices. Busts measuring 20-30 cm were priced 395,000-565,000 CFA, a larger 35 cm bust cost 795,000 CFA, a 35 cm section of tusk with the Last Supper carved on it was 495,000 CFA, a simple pair of chopsticks cost 19,000 CFA and a standard 12 cm pineapple was 165,000 CFA. The same pineapple in Abidjan could be bought for 20,000 CFA.

The total estimated weight for the ivory was 14.6 kg.

Dakar's luxury hotels carried very little ivory. The Sofitel art boutique displayed 12 pieces weighing about 2.2 kg, the Novotel incidentals shop carried 11 pieces weighing approximately 1 kg, and the Meridien President Hotel out at the Pointe des Almadies had only four ivory necklaces and one figurine. No other hotels were found to carry ivory.

The Artisan Market of Touba Almadies at the Pointe des Almadies used to sell worked ivory, but only two out of 20 stalls were open at the time of the visit. Neither stall carried ivory, though several worked pig teeth pieces were for sale. Most of the stalls in the market were closed because the nearby Club Méditerranée, the main source of clients, was closed for renovations.

In all, 30 outlets in Dakar carried 4,338 pieces of ivory (see Table 13 for the ivory items and prices) weighing an estimated 407 kg with an average 94 g per piece. Tom Milliken (pers. comm., 2000) reports that he saw several tonnes of worked ivory in Dakar in late 1996. CITES moved to place sanctions against Senegal in early 1999 for failing to implement the Convention, with the selling of large quantities of ivory an obvious transgression in a country with few elephants. It appears worked ivory has decreased markedly between 1996 and 1999 on the open market, and the sanctions might explain the unco-operative nature of the vendors.

Table 13
Average retail prices for ivory items in Dakar in July 1999.

Item*	Size/description	Starting CFA price	Final CFA price**
Necklace	small beads	12,000	5,000
	large beads	10,000-30,000	5,000-8,000
	rosaries	17,000-50,000	10,000
Bracelet	<1 cm width	6,000-10,000	1,200-1,500
	<1 cm (set of 7)	16,000-30,000	8,000
	1-2.5 cm width	9,000-22,000	3,000-6,000
	>2.5 cm width	15,000-35,000	5,000-8,500
Ring		2,500	500-1,000
Earrings, pair		5,000	1,000-2,000
Animal	<5 cm	6,000-25,000	1,200
	3-7 cm (set of 5)	20,000-30,000	10,000-12,000
	5-10 cm (thin)	5,000-6,000	2,000-3,000
	5-10 cm	6,000-15,000	3,000-5,000
	10-20 cm	75,000-80,000	24,000-40,000
	10-20 cm (thin)	25,000	7,000
	20-30 cm	40,000-125,000	10,000-50,000
	30-40 cm	100,000-250,000	40,000-90,000
40-50 cm (lobsters)	750,000	60,000	
Bust	<5 cm	6,000	2,000
	5-10 cm	25,000-50,000	6,000-18,000
	10-20 cm	60,000-150,000	18,000-60,000
	20-30 cm	150,000-300,000	50,000-100,000
	30-40 cm	350,000-450,000	150,000-180,000

Table 13
Average retail prices for ivory items in Dakar in July 1999.

Item*	Size/description	Starting CFA price	Final CFA price**
Figurine	<5 cm	3,000	1,000
	10-20 cm	60,000	5,000-30,000
	20-30 cm	150,000-250,000	30,000-50,000
	30-40 cm	200,000-450,000	40,000-80,000
	40-50 cm	200,000-500,000	60,000-120,000
	50-60 cm	250,000	120,000
Mask/profile	5-10 cm	5,000-15,000	3,000-5,000
	10-20 cm	15,000	6,000
	20-30 cm	25,000-50,000	12,000-15,000
	30-40 cm	100,000	24,000
Carved tusk	<1 kg	20,000-350,000	<50,000
	1-2 kg	125,000-350,000	40,000-90,000
	2-3 kg	400,000	90,000-120,000
	3-4 kg	800,000	120,000-200,000
	4-5 kg	700,000	200,000
hollow sections	40 cm (lamp)	120,000	50,000
Polished tusk	<1 kg	100,000-120,000	<40,000
	1-2 kg	250,000	40,000-80,000
	2-3 kg	300,000	80,000-120,000
	3-4 kg	400,000	120,000-160,000
	4-5 kg	450,000-500,000	180,000-220,000
<i>Tche warra</i> (stylized antelope head) Lidded box	20-30 cm	30,000	15,000
	5-10 cm	12,000	7,000
	>10 cm	25,000	12,000
Pendant	4-6 cm	15,000	3,000
Fruit, 12 pcs	3-8 cm each	2,500-16,667 each	1,500-5,000 each
	4-25 cm each	25,000-45,833 each	9,000-16,000 each
Grape bunch	.4kg	250,000	36,000
Table 13 continued.			
Paperknife	12-15 cm	10,000	3,000
Comb	<10 cm	12,000	3,000
	>10 cm	17,000	8,000
Hairpin	12 cm	5,000	1,500
Hair clip	5,000-8,000	1,500-2,400	
Knife stand		5,000	1,800
Pipe	10 cm	6,000	3,000
Cigarette holder		3,000	1,500
Key chain		7,000	2,000
Spoon & fork	15cm	15,000	5,000
Chopsticks, pair		15,000	5,000
Name seal	6-8 cm	14,000-16,000	5,000-6,000
Lamp stand	30cm	100,000	30,000
Galleon	50 cm	400,000	120,000

* Excludes "antique" pieces, old ivory, and jewellery pieces with gold.

** Estimated.

N.B. US \$ 1 = 610 CFA.

Ivory workshops in Dakar

The only two ivory workshops found in Dakar were both at the Soumbédioune crafts market. Everyone there said that the only ivory workshops in the city were located there. One, in the rear of the market, employed three craftsmen. Two 2 kg tusks were being carved at the time of the visit. The other workshop was in the rear of one of the larger ivory shops. The single craftsman was working on a warthog tusk at the time of the visit. No one at the larger workshop would answer any questions at all. The other craftsman/vendor said that he had no stock of raw ivory at the moment. The items he carved all went to the shops in the Soumbédioune market, but he would carve pieces on commission if a client requested it. He said that the demand for worked ivory was poor.

The vendor at the larger of the two street stalls near the Kermel Market said that he carved his own pieces, but he declined the investigator's request to visit his workshop: He said that he knew only of the workshops at the Soumbédioune market in Dakar. He said that other ivory workshops existed outside of Dakar, but he would not specify where.

The apparent dearth of ivory workshops and craftsmen in Dakar supports a picture of a slow market and the import of more worked ivory pieces than of raw ivory.

Sources and prices of raw ivory in Dakar

The import of raw ivory into Senegal is illegal and apparently strictly controlled, according to one vendor. This limits the available stocks for carving and results in high prices for both raw and worked ivory. Only one person answered the question of the source of the raw ivory coming into Senegal. The French proprietor of the Galerie Antenna said that the ivory came from Sudan. There was no way to confirm the accuracy of this.

Only one vendor from Soumbédioune would give a price for raw ivory, which did not sound plausible. He said that he paid the equivalent of \$145/kg for 2-3 kg polished tusks from the craftsman. The labour mark-up on polished tusks is quite low, thus the raw ivory to the craftsman would not have cost less than \$100-120/kg. The same vendor said that raw ivory prices were cheaper last year and previous to then, but that the price had gone up over the past year. He claimed not to know the exact price at any previous time:

Chad

The legal position of the ivory trade in Chad

Chad joined CITES in 1989, but the sale of carved ivory within the country is legal.

N'Djamena

Introduction

N'Djamena was visited from 5 to 7 November 1999. Unfortunately, the work was cut short due to unforeseen circumstances and only incomplete information was obtained in the initial survey stage of the study. Worked ivory is sold mainly at table stalls inside the Hôtel du Chari, at crafts displays along what is known as the Nassara Strip along a section of the Avenue Charles de Gaulle, in some crafts stalls near the Novotel la Tchadienne hotel and at table stalls in the airport. There is no centralized crafts market, unlike the other cities studied in Central and West Africa, though crafts other than ivory are sold in the Grand Marché.

Retail outlets and prices for worked ivory in N'Djamena

The Hôtel du Chari has nine crafts table stalls in the lobby area, five of which sell small quantities of ivory. The largest pieces were carved tusks about 40 cm in length (~1 kg) and 30 cm high statuettes. The most numerous pieces were jewellery such as necklaces and various sized bracelets. Animals, busts, key chains, paperknives and other items were also for sale. Some 459 pieces weighing an estimated 18 kg were seen. A couple of dozen street vendors, mainly women, sell crafts laid out on cloths along the Avenue Charles de Gaulle near the two main supermarkets. Only eight of these displayed small amounts of worked ivory, mainly jewellery and trinkets. They did not sell larger carved pieces. The main items sold are beads, leather work and textiles. Some 388 ivory items were counted here weighing an estimated 11 kg.

There are a few crafts stalls near the Novotel hotel, four of which contained worked ivory items similar in composition to those seen in the Hôtel du Chari. The survey was interrupted here before the investigator had a chance to count the items, but there were perhaps 500 in all. It was not possible to estimate their total weight. Again, there were no pieces larger than perhaps 2 kg maximum. There are seven table crafts stalls in the airport, all of which sell small amounts of ivory, perhaps 100 pieces weighing not more than 4 kg.

Informants said that no other places in N'Djamena sell ivory. The 24 outlets seen carried over 1,000 pieces weighing more than 33 kg, but not exceeding 50 kg in all. Therefore, N'Djamena is not a very important centre for the worked ivory market. The main ivory buyers were said to be French. Very few tourists visit Chad, and vendors said that ivory sales were very poor.

Due to the lack of time it was not possible to obtain comprehensive pricing of the worked ivory pieces, though the prices of certain pieces were collected as shown below (see Table 14). No bargaining was undertaken, thus the final prices would be about 50-60% less than those listed. The carved ivory pieces were said to be imported from CAR or Cameroon.

Table 14
Average retail prices for ivory items in N'Djamena in November 1999.

Item	Size/description	Starting CFA price*
Necklace	small beads	4,000-6,000
Bracelet	<1 cm width	1,500-3,000
	>2.5 cm width	5,000
Animal	5-10 cm	9,000-14,000
Bust	10-20 cm	15,000-50,000
Figurine	10-20 cm	25,000
Carved tusk	<1 kg	20,000-35,000
Fruit, 12 pcs	3-5 cm each	5,000-30,000/set
Key chain	5-8 cm	2,000-3,000
Paperknife	12-15 cm	2,000-5,000

* For final price after bargaining, deduct 50-60%.
N.B. US\$1 = 610 CFA.

Ivory workshops in N'Djamena

Vendors said that there were no ivory workshops in N'Djamena, but this was found to be a common response encountered to the question in most countries visited. There was not time to find a reliable informant who might have been able to find any possible ivory workshops in the city.

Sources and prices of raw ivory in N'Djamena

The three vendors who were asked about the price of raw ivory claimed ignorance, as they said that they did not buy raw ivory. Since no workshops were found, no craftsmen could be asked the question.

Djibouti

The legal position of the ivory trade in Djibouti

In 1992 the Djibouti government acceded to CITES, which prohibits international trade in endangered species, including elephant ivory, cheetah and leopard skins. The government has so far ignored its obligation to enforce these CITES regulations (Emerton, 1998; and O. Habib, Bureau de la Biodiversité, Djibouti, pers. comm., June 1999). Products from endangered wildlife are imported and exported without the risk of confiscation by authorities at the borders.

Furthermore, there is no legislation prohibiting internal sales of elephant tusks and carved ivory items, or other non-indigenous wildlife products. Thus the vendors are not breaking any law selling ivory items (or cat skins) within the country.

Djibouti-ville

Introduction

The survey was carried out in Djibouti-ville from 20 to 22 June 1999. Besides this work, the investigator had hired in May 1999 a Djibouti person to study in some depth the main market for wildlife products. The investigator had also visited Djibouti in October 1978.

Djibouti-ville is the capital of Djibouti which is an arid country situated in the horn of Africa on the Gulf of Aden. It is one of the smallest countries in Africa. Ethiopia is about 47 times bigger. The official population in 1996 was estimated at 620,000 (Ministère de l'Environnement, 1998) consisting mostly of two ethnic groups: the Afars originally from Ethiopia, and the Issas originally from Somalia. There is also a sizeable population of French nationalities, perhaps 6,000, most of whom are connected with the French armed forces. Unlike other African countries, about three-quarters of the population lives in the capital city, Djibouti-ville.

Retail outlets and prices for worked ivory in Djibouti-ville

The main retail market for wildlife products in the city is located on Brazzaville Avenue. The market has been there since 1981. Before then, a smaller market existed on Place Menelik and was there for several decades. In 1978 the investigator visited the street stalls with wildlife products on Place Menelik. He saw several stall keepers selling leopard skins for FD 60,000 (\$399), and cheetah skins for FD 25,000 (\$141) which had mostly originated from the Ogaden region in south-east Ethiopia and adjoining parts of western Somalia. At that time and in the previous decade the most sought after leopard skins for the international market were those from Somalia because they were light in colour and had short hair (A.L. Archer, wildlife consultant, pers. comm., September 1999). Ivory was also for sale in 1978, but no survey was conducted then.

In 1990 a survey was carried out by the National Committee of the Environment of the "stocks of wildlife products in souvenir shops, Djibouti-ville". It showed in excess of 286 ostrich eggs, 200 turtle shells, 12 cheetah skins and five leopard skins. The numbers of other products seen were not recorded, such as dik dik skins and horns (for jewellery), snake skins, shark teeth and jaws, dried sea horses and warthog tusks. There were also three live young cheetahs and one live young kite. The survey found "worked horn and ivory [in] most shops" but numbers of pieces were not specified except for six unworked ivory tusks (Emerton, 1998).

In May 1999 during the first survey of the Brazzaville Avenue market organized by the investigator, there were 20 open souvenir outlets, 19 owned and managed by men. They were all from Djibouti, mainly ethnically Somalis: 13 Issas, 3 Ishaks, 3 Samarons, and one was of Ethiopian origin, an Amhara. The shops were all small and simple, sometimes with fans but without air conditioning. The rents were thus low at FD 3,000 (\$17) per month.

The June 1999 survey concentrated on all ivory products for retail sale in Djibouti-ville and to a lesser extent on ostrich shells and cheetah and leopard skins, the other most significant wildlife items. There were 18 shops and stalls selling ivory, along with other souvenirs, in Djibouti-ville (see Table 15). Fifteen of these shops were in the market along both sides of Brazzaville Avenue. There were four other souvenir outlets in this market that were open but they did not sell ivory.

Most of these shops and stalls sold other wildlife products and wooden carvings from Kenya and Tanzania as well. The outdoor stalls displayed a greater percentage of cat skins. New shops are opening since a fire in October 1998 destroyed some of the market.

In June 1999 there were 386 ivory pieces for sale on Brazzaville Avenue. Many of them were over five years old as the turnover is slow. The

number of ivory pieces in the 15 outlets in the market varied from two to 110 with an average of 26. Small wild animal carvings were most commonly available, such as elephants, rhinos, hippos and lions. These accounted for about half of the ivory items for sale followed by busts, combs, pipes, fruit, knives and bracelets (see Table 16). All were small and quite easy to smuggle out of Djibouti. There were a few larger pieces such as carved tusks and batons (but most of these were wooden). The carving is from poor to mediocre quality compared with that of southern Africa. The most expensive item was a 60 cm tusk with five elephants carved along it, supposedly crafted in Somalia, for FD 45,000 (\$254). The cheapest were the animals, combs and knives, for sometimes as little as FD 1,500 (\$8.47) each.

Apart from this main wildlife product market, three other outlets in Djibouti-ville displayed ivory for sale. One stall on Place Menelik was selling 16 ivory items. A souvenir shop in the city's most expensive hotel displayed six busts for sale. A camera shop owned by a Frenchman offered 28 ivory fruits, 13 animals, two combs and two busts.

Ostrich eggs are the most popular wildlife product for sale in Djibouti-ville after ivory. In June 1999 there were for sale in Djibouti-ville 322 ostrich eggs, 301 plain and 21 painted. Four were in Djibouti's main hotel

shop, one on a stall outside this hotel, and the rest were in 16 outlets in the Brazzaville market. Each of these 16 shops and stalls displayed from two to 14 eggs. The average retail price for a plain one was FD 1,578 (\$8.92) and for a painted one FD 3,595 (\$20.31). Djibouti has a few wild ostriches, but most of the eggs are from Somalia and south-east Ethiopia.

Cat skins are another important wildlife product on display in Djibouti-ville. Although sales of these are infrequent, there were many more offered for sale in 1999 than in 1990 or 1978, all in the Brazzaville Avenue market. Five outlets displayed seven cheetah skins for an average retail price of FD 17,857 (\$101) and 12 outlets displayed 59 leopard skins for an average retail price of FD 33,898 (\$192). The prices were higher in the 1970s as there was a greater demand for them in Europe and eastern Asia then. The cheetah skins of today probably originate from Somalia, southern Ethiopia and the Ogaden region of south-east Ethiopia. The darker leopard skins with longer hair are the forest type of leopard, which are from the highlands of Ethiopia (Archer, pers. comm., September 1999). The other leopard skins come also from Ethiopia and possibly from Kenya and Somalia as well. Ethiopians usually bring these skins into Djibouti.

Djibouti has a very small manufacturing base, and also produces very few souvenirs (Emerton, 1998). No ivory is crafted in the country although it could be carved there because raw ivory is available for \$68 a kg from an importer, according to the May 1999 survey. Most of the ivory is carved in Ethiopia (see next section), and some is crafted in Somalia. The investigator was unable to visit Somalia due to the poor security. He therefore interviewed the Chief Security Adviser to the United Nations for Somalia, Wayne Long, who has been visiting Somalia on a regular basis since 1995. There is at least one workshop in Mogadishu, which produces ivory items, and it is

Table 15
Retail outlets selling ivory items in Djibouti-ville in June 1999.

	Outlets	Ivory items
Brazzaville Avenue market	15	386
Elsewhere in Djibouti-ville	3	67
Total	18	453

Table 16
Average retail prices for ivory items in Djibouti-ville in June 1999.

Item	Size in cm	Starting FD price*	Converted US \$ price*
Wild animal	2.5 to 4 x 5	2,542	14.36
Bust	15	14,400	81.36
Bracelet	1.25 to 4	2,875	16.24
Comb	7.5 to 12	2,500	14.12
Pipe	12 to 15	18,667	105.00
Knife, ivory blade with malachite handle	12 to 15	4,500	25.43
Fruit	3to7	2,125	12.00

*For final price after bargaining, deduct 30%.

located in the main market called Bakara market. It fills a large square of about one square kilometre lined by stalls where every conceivable item is sold, including gold. Attached to one stall is a workshop where three older Somali men craft ivory. When Mr Long examined this workshop in April 1999, one artisan was carving a raw tusk of about 60 cm in length, very similar to some for sale in Djibouti. Such items are also sold in the workshop. Ivory products are

for sale at the Isaley Airport 20 km north of Mogadishu. There, Mr Long has recently seen about 25 items made from elephant ivory, including necklaces, bracelets and figurines. Hippo teeth were also on sale. He believes that the buyers are wealthy expatriates of Somali origin, foreign diplomats, and UN officials visiting Mogadishu and employees of donor organizations. The sellers accept only US dollars (W. Long, pers. comm., October 1999).

The main customers for the ivory pieces for sale in Djibouti, whether they are of Ethiopian, Somalian or even occasionally of Tanzanian origin, are French residents, who are mostly military personnel, and some of their visiting relatives. A few businessmen and aircraft crew members buy ivory. Very few others come and stay in Djibouti as the tourist sector is poorly developed and Djibouti is an expensive country for a foreigner. A few cruise ships do pull in each year and some passengers buy ivory. Djibouti citizens rarely buy these items or other souvenirs as they are not interested in them.

The numbers of French military in Djibouti have been decreasing over the past few years, and resident wives and children are now being phased out. The sales of ivory items and other souvenirs have thus declined. At the time of the June 1999 survey, the investigator saw very few customers in the souvenir shops. This was because it was one of the hottest months of the year and the school holidays had begun so most of the French dependents had left the country. Decreased sales of souvenirs in general will probably continue unless the French government reverses its policy of reducing their military personnel and families, or until tourist numbers increase. Chris Magin of the IUCN office in Djibouti-ville believes, however, that the new policy of having French troops in Djibouti for shorter periods might actually increase sales as there will be a greater turnover of potential customers (C. Magin, pers. comm., 1999). The Djibouti souvenir vendors said in May 1999 that their best years of business (except for cheetah and leopard skins) were from 1983 to 1990. The 1990 CITES ban on the international ivory trade also negatively affected the ivory trade in Djibouti.

None of the vendors mentioned the one-off sales in April 1999 of ivory in Zimbabwe, Botswana and Namibia to Japan, presumably through lack of knowledge.

Sources and prices of worked and raw ivory in Djibouti-ville

Smugglers carry tusks and ivory carvings into Djibouti mostly overland, having been illegally exported from Ethiopia, Somalia and a little from Tanzania. Transport includes trucks and cars, boats, donkeys, camels and some smugglers go part of the way by foot. Mr Long believes that some of the Somali ivory products may be moved to Hargeisa (where he saw six leopard and cheetah skins for sale in 1998), and then be taken by road to Djibouti. The Djibouti/Addis Ababa railway is apparently not much used for smuggling wildlife products as the authorities of both countries are more vigilant in checking people and cargo.

Some of the ivory items for sale in Djibouti that had been carved in Ethiopia and Somalia were from tusks which were illegally taken from Kenya, according to Djibouti vendors. In Marsabit in northern Kenya in August 1999 an average tusk was worth 800 Kenya shillings (\$11) per kg, while farther north at the Kenya-Ethiopia border it was 1,500 Ksh (\$20.50), according to the intelligence unit of the Kenya Wildlife Service.

Little, if any effort is made by the Djibouti government to stop ivory imports or exports although they are illegal. As stated earlier, it is the French military who are mostly involved in exporting ivory. Apparently the majority of French troops who are flown back to France do not land at the main airports but at military bases where fewer inspections are carried out for illegal wildlife products such as ivory.

References

- Emerton, L. (1998). Djibouti Biodiversity: Economic Assessment, unpublished report for IUCN.
Djibouti Government, Ministère de l'Environnement du Tourisme et de l'Artisanat, Direction de l'Environnement (1998). Plan d'Action National pour l'Environnement (PANE), first version, unpublished.

Ethiopia

The legal position of the ivory trade in Ethiopia today

Ethiopia became a Party to CITES in 1989, but Ethiopian law still permits trade in tusks or carvings from ivory legally obtained from government auctions until about 1990. Afterwards there was no legal source of new raw tusks. But the government almost never inspects the ivory workshops or retail shops for illegally obtained tusks. There have been occasional seizures of ivory by Customs officials at the airport in Addis Ababa (Milliken, pers. comm., 2000), but there are very few checks for new, illegal ivory coming into the country overland from Kenya and Sudan. Officials have placed notices in the inflight magazine of Ethiopian Airways alerting people to the perils of buying ivory items and have produced 'Buyer Beware' brochures on wildlife trade and CITES which pointedly warn consumers not to buy ivory (Milliken, pers. comm., 2000). Nevertheless, the continued trade in illegal tusks is putting pressure on the remaining elephants in the country and across the borders in Kenya and Sudan, as there is still a demand for new ivory to make into various items for foreign tourists and foreign residents.

Addis Ababa

Introduction

This fieldwork in Addis Ababa was carried out from 23 to 27 June 1999, and earlier ivory work had been conducted by the investigator in February 1993. Addis Ababa, Ethiopia's capital, is the only place today where ivory in Ethiopia is worked and displayed for sale in quantity. Unlike Djibouti, Ethiopia has a very old relationship with ivory. Ivory objects such as slats and panels have been found in the Tomb of the Brick Arches in Aksum, which dates to around the late third century AD (Phillipson and Reynolds, 1996). Ethiopia is also known for having exported large quantities of raw ivory for centuries. The *Periplus of the Erythraean Sea*, which was probably written in the first century, mentions that the main port for Aksum (called Adouli or Adulis) was a centre for the trade and export of ivory tusks. According to *The Periplus* there were many elephants in northern Ethiopia at that time. "For the whole quantity of elephant and rhinoceros which is killed grazes in the interior; though occasionally they are seen by the sea round about Adouli" (Huntingford, 1980).

In past centuries ivory carving was not a practice except among a few tribal groups who made ivory bangles in the west and south-west of Ethiopia. The highland Ethiopians excelled in wall paintings, icons, illustrations in manuscripts and metalwork, but not in carving or sculpture. Traditionally there has been little furniture in Ethiopian houses except stools. People usually sat on carpets. The few sofas with ivory inlay seen in the Gondar palaces were imported from India, and the 18th century ivory mirrors were probably from Venice (R. Pankhurst, long-term resident and academic, pers. comm., 1999).

Most of the elephants were eliminated in northern Ethiopia in the 19th century with the introduction of modern firearms (Pankhurst, 1968) and due to a rising demand for ivory in Asia and Europe. In those days Ethiopia was more accessible than Central Africa so heavy hunting occurred there first.

Today, Ethiopia imports much more raw ivory than it exports because the elephants have been decimated by hunters and by human population growth. In 1987 there were about 6,650 elephants in Ethiopia (IUCN/AERSE, 1991). By 1995 there were only an estimated 2,407 elephants in the whole country (Said et al., 1995).

Addis Ababa, is a large city with over three million people. The next largest city is Dire Dawa with less than 200,000 people which attracts few foreigners (who are the main buyers of ivory items). Thus, in June 1999 (and 1993) the investigator concentrated his work on the capital.

Ivory trade study in Addis Ababa in 1993

In February 1993 the investigator carried out a brief survey of the ivory items crafted by Ethiopians in Addis Ababa and their prices (Martin and Vigne, 1993, Vigne and Martin, 1993). A craftsman at that time bought raw tusks for 200 birr (\$40.40 official rate and \$28.57 free market rate) for a small

piece of <3 kg, and 300 birr (\$60.65 official rate and \$42.86 free market rate) for a larger piece of about 5 kg. The manager of perhaps the largest ivory carving workshop in Ethiopia at that time said the tusks came from Ethiopian elephants from the south-west. Some also originated from Kenya. In mid-1993 a group of elephant carcasses were found in northern Kenya near the Ethiopian border; the tusks were about to be transported across the international boundary (Vigne and Martin, 1993). From intelligence sources within Kenya it is well known that for many years elephants killed in northern Kenya have had their tusks removed and taken to Ethiopia and Somalia.

In 1993 the largest ivory workshop employed 20 people working new ivory. Demand for ivory items was still strong then. Common pieces made were wild animals, jewellery, combs, busts and figurines (see Table 17).

Table 17
Average retail prices for ivory items in Addis Ababa in February 1993.

Item	Size in cm	Starting birr price*	Converted US \$ price*
Bangle	0.8	40	8.09
Cigarette holder	10	100	20.20
Lion	9x9	150	30.30
Comb	11	150	30.30
Beaded necklace		250	50.51
Pipe made as female nude	20	350	70.70
Female bust	12.5	600	121.00
King Menelik statuette	40	1,200	242.00
Candelabra for five candles	40	2,000	404.00
Chess set		2,500	505.00
Vase, carved from base of tusk	12x30	2,500	505.00

* For final price after bargaining, deduct 30%.

N.B. The prices have been converted to US dollars using the official exchange rate, at the time of 4.95 birr to the US dollar instead of the unofficial rate of 7.00, because most foreign tourists, who were the major buyers, used the official rate.

Retail outlets and prices for worked ivory in Addis Ababa in 1999

Perhaps 75% of the souvenir shops in Addis Ababa, excluding the hotel ones, sell ivory. There were 54 such shops in Addis Ababa displaying a total of 9,996 ivory items. Most (43) of them are in and around Churchill Road, the main shopping street. The amount of ivory displayed for sale in these 43 curio shops in central Addis Ababa varied from four pieces to 980 with an average of 204 in the 1999 survey. There were some shops with ivory near the airport, but only one hotel shop in Addis Ababa displayed ivory for sale, just 32 items.

The other main location for shops offering ivory items in Addis Ababa is the Mercato, the main market. There were 11 shops in June 1999 selling a total of 1,232 ivory pieces varying from six items in one shop to 551. Less often, tourists shop in the Mercato, however, as it is farther from the hotels than Churchill Road, has poor security and dim lighting, and because more bargaining is required while the knowledge of European languages is weak. There was less ivory on display in the Mercato in 1999 compared with 1993 or 1996 when the investigator carried out surveys of this market.

Shops have been selling ivory in Addis Ababa, especially the Churchill Road area since at least the 1940s (Pankhurst, pers. comm., June 1999). Exactly when such carving started in Addis Ababa is not known. Ivory sales gradually increased with the arrival of more foreign residents and tourists, until the introduction of the Marxist regime in the mid-1970s. Ivory sales continued to some extent, but increased significantly once more in the early 1990s when tourism opened up after the fall of the Mengistu government. Since May 1998 with the start of the fighting between the Eritreans and Ethiopians the number of tourists has been declining sharply in Ethiopia. In June 1999 tourism had probably declined by at least 80%, greatly affecting the sale of ivory pieces. There was very little business in the majority of souvenir shops in Addis Ababa in the first half of 1999 and some owners could not earn enough money to cover their shop rents. Most Ethiopians very rarely buy ivory items as it is not part of their fashion.

Common ivory items in the shops today are ear picks (unique in Africa), name seals (absent in Djibouti), combs, jewellery, wild animals, pipes, busts, vases and masks (see Table 18). Less common items are paperknives, batons, walking sticks, polished tusks and statuettes (including one of Buddha). The cheapest items are thin rings that can sell for as little as four birr (\$0.50). The most expensive piece was a 90cm long carved tusk crafted some decades ago and obtained in the Gambela region of western Ethiopia near Sudan, priced at 7,500 birr (\$937).

There are several quite old items for sale in Addis Ababa, unlike in Djibouti. Most are bangles from the Gambela region made probably by the Dinka and Nuer tribes originating from southern Sudan. At least 19 shops sell them. They are triple the price of newly made ivory bangles of the same size (see Table 18).

The main buyers of these ivory items in the mid-1980s were the British and Americans. After the international ivory ban in 1990, these nationalities largely stopped buying ivory but many French, Italians, Chinese, Japanese and Koreans continued to buy ivory despite the ban, according to the vendors. The French and Italians, mostly tourists, prefer small pieces that are easy to conceal in their luggage, according to the vendors, as imports into their countries are illegal. The Chinese are usually labourers working on development projects, for example, road construction. They buy name seals, chopsticks and jewellery, as do the Japanese who are usually businessmen or diplomats. To meet their demand, more name seals and chopsticks have been made recently. The Koreans are either residents or visitors from other parts of Africa, and they buy mostly ivory jewellery and sometimes animal skins such as from colobus monkeys and cheetahs, according to the souvenir shop owners. Many of the buyers are foreign diplomats, UN employees in Addis Ababa, or people attending conferences. The Organization of African Unity's headquarters is in Addis Ababa and this attracts diplomats from all over the continent, some of whom buy ivory, especially the West and Central Africans. Addis Ababa's airport is one of the major airports in Africa, and passengers of many nationalities can and do come into the city between their flights and some buy ivory items for personal use or to sell to traders. Eastern Asian diplomats based in Addis Ababa (and elsewhere in Africa) are notorious for buying ivory to sell in China, South Korea and other parts of Asia.

Table 18
Average retail prices for ivory items in Addis Ababa in June 1999.

Item	Size in cm	Starting birr price*	Converted US \$ price*
Ring	very thin	7	0.87
Roman letter	3	10	1.25
Earpick	5	15	1.87
Ear rings, pair	2.5	50	6.25
Chopsticks, pair	20	52	6.50
Name seal	8-10	67	8.37
Comb	10	77	9.62
Wild animal	5	82	10.25
Bangle	2.5	103	12.87
Ethiopian cross	19	172	21.50
Pipe	11	202	25.31
Bangle, old, most from Sudan	2.5	300	37.50
Bust	10	403	50.37
Vase	17	575	71.88
Mask	17	800	100.00
Bridge, carved tusk	90	1,750	219.00

* For final price after bargaining, deduct 30%.

Ivory workshops in Addis Ababa in 1999

Despite the very recent near collapse of retail sales in ivory, due to the drop in tourism because of the war, some craftsmen are still making new ivory pieces in Addis Ababa. In the former main workshop (which almost closed down in 1998), there was only one part-time craftsman remaining in June 1999 and he had switched from ivory to working in silver and gold. If he were to receive a special order, he would work in ivory and would earn about 1,000 birr (\$125) a month, the same as

for working gold and silver. It is difficult to state an exact figure of the number of ivory craftsmen working in Addis Ababa today, but ivory salesmen estimated that there were from 10 to 20 and that their numbers had fallen due to lack of customers, especially since 1998. Of the craftsmen interviewed by the investigator in June 1999, the most skilled earns \$1,400 birr (\$175) a month while a mediocre craftsman earns 400 birr (\$50). The average is probably around 600 birr (\$75) per month. They are paid either a salary or a sum for what they produce, usually on a weekly basis. They work a full six-day week and when there are insufficient supplies of ivory they tend to craft wood, warthog tusks and other materials. As in most African countries, they use both hand tools and electrically powered lathes and drills. The quality of the ivory pieces made in the 1990s is of a lower standard than what was produced in southern Africa ten years ago.

Some of the ivory craftsmen are from the Gurage ethnic group who number many hundreds of thousands and are from an area 100 km south of the capital. The Gurage do not spend their time ploughing as their diet is based on the false banana root, so they come to Addis Ababa for six months a year looking for work. Some are traditional wood and bamboo craftsmen, but they work in ivory as well (Pankhurst and Nida, 1999).

There is also an Italian artist, Vittoria Morello, who worked in ivory from 1974 to 1996, but stopped due to a lack of customers. He carved large tusks, and made sculptures, boxes and other intricate items for senior members of the Ethiopian government, foreign residents in Addis Ababa and for tourists. Some of these items remain in his workshop/showroom near the airport and are still for sale. His style of ivory carving is individualized, not at all like the typical Ethiopian style. With the decline in number of ivory customers, Mr Morello now concentrates on other materials such as wood, silver, bronze and marble, but his business is poor. Since the start of the border war with Ethiopia and Eritrea in 1998, Mr Morello has had to terminate the employment of 26 of his 30 workers.

Sources and prices of raw ivory in Addis Ababa in 1999

Mr Morello and some other ivory craftsmen used to purchase tusks from the Ethiopian government at auction. As these auctions stopped around 1990, most tusks have since been bought from private traders in Ethiopia. The craftsmen state that there are two main sources for raw ivory in Ethiopia today: from the south and from Gambela in the west. The ivory from the south probably originates from elephants in south-west Ethiopia and from Kenya, mostly from poached animals. The ivory from the Gambela region largely originates from southern Sudan and from south-west Ethiopia. Most tusks are brought to the capital in lorries, according to the traders. The price of raw ivory varies according to its weight and quality (see Table 19).

Prices for raw ivory in the first half of 1999 were the same as for 1998 in birr, but in hard currency, prices declined by about 13% due to the devaluation of the Ethiopian birr. This decline is linked with the collapse of tourism.

Table 19
Average prices paid for raw ivory by the craftsmen or workshop owners in Addis Ababa in early 1999.

Weight	Birr price	Converted US \$ price
<1kg	225	28.12
1—2 kg	300	37.50
5—10kg	350	43.75
>25 kg	500	62.50

References

- Huntingford, G.W.B. (translator and editor) (1980). *The Periplus of the Erythraean Sea*. The Hakluyt Society, London, UK.
- IUCN/AERSG (1991). African Elephant and Rhino Specialist Group. Annual Meeting 2-5 July 1991, Agenda and Supporting Documentation, Gaborone, Botswana, unpublished report.
- Martin, E.B. and Vigne, L. (1993). Ivory Trade Alive in Addis Ababa, *BBC Wildlife*, 11(6), 11.
- Pankhurst, A. and Nida, W. (1999). "Fuga" Craft and Art, unpublished report.
- Pankhurst, R. (1968). *Economic History of Ethiopia 1800-1935*. Haile Sellassie I University Press, Addis Ababa, Ethiopia.
- Phillipson, D. and Reynolds, A. (1996). B.I.E.A. Excavations at Aksum, Northern-Ethiopia, 1995, *Azania*, XXXI, 99-147.
- Said, M.Y. et al. (1995). *African Elephant Database 1995*. IUCN, Gland, Switzerland.
- Vigne, L. and Martin E.B. (1993). Ethiopia's active trade in ivory, *Swara*, 16 (6), 28-29.

Zimbabwe

The legal position of the ivory trade in Zimbabwe

Zimbabwe joined CITES in 1981. At the Tenth Meeting of the Conference of the Parties to CITES held in Harare in June 1997, Zimbabwe was permitted from 18 September of that year under CITES regulations once again to export elephant hides, elephant leather goods and ivory carvings, but only for non-commercial purposes. This means that ivory items can be exported legally as personal commodities if they are not to be re-sold. Most importing countries, however, such as the United States, nations of the European Union and Japan maintain stricter trade measures (allowed by CITES) and do not permit the import of any Zimbabwe-made ivory pieces (TRAFFIC USA, 1997, and Gray, 1997). The internal trade in raw ivory and ivory products has been legal in Zimbabwe for decades.

The CITES meeting in 1997 also assigned Zimbabwe, Botswana and Namibia, under certain conditions, a single “experimental quota sale” in raw ivory for export to Japan. This could not take place until 18 March 1999 which was 18 months after the transfer of these countries’ elephant populations to Appendix II came into effect. Zimbabwe’s “experimental quota” was 20 tonnes (Gray, 1997). In April 1999 the Zimbabwe government held the auction for their quota of government registered raw ivory and subsequently this ivory was exported to Japan.

Harare

Introduction

The survey in Harare took place from 17 to 24 July 1999. The modern ivory manufacturing industry started in Zimbabwe in 1973 (Martin, 1984) and prospered until the introduction of national and international legislation in 1989 and 1990 which prohibited the import of elephant ivory into the main markets for Zimbabwean ivory pieces: USA, Europe and Japan. By November 1990 retail sales of ivory items in Harare had declined by at least 75% (Martin, 1991). When the investigator was in Harare for the June 1997 CITES meeting, he was told by the main retail sellers that their business in ivory had declined further, by over 90% compared with 1988.

Retail outlets and prices for worked ivory in Harare

There are 23 retail outlets selling 19,958 items, mostly old stock made prior to 1990. Five shops offer 71% of all the items; the largest number of pieces for sale in any single shop is 3,641. The most common pieces are key rings, jewellery, boxes, wild animals, and human figures (see Table 20). Other items include napkin rings, paperknives, hair clips, name seals, candlesticks, chopsticks, chess sets, belt buckles, roses, lamps, polished tusks and bridges. The retail prices for most of these items are cheap in US dollars because of the heavy devaluation of the Zimbabwe dollar since late 1998. From January to October 1998 the Zimbabwe dollar stayed roughly stable at around 18 to one US dollar, but from November declined by half. In June 1999 one US dollar bought about 37 Zimbabwe dollars. A second reason for the cheap ivory items is that prices of tusks at the Department of National Parks and Wild Life Management are some of the lowest in Africa. Some officials believe this policy will help to discourage elephant poaching. The cheapest ivory item for retail sale was a thin ring for Z \$30 (less than one US dollar) while the most expensive items were a 45 cm tall human figure and a 15 cm polished tusk, each for Z \$90,000 (US \$2,432).

Even with the low prices, there are very few buyers as most countries still will not allow the import of ivory and most westerners believe that ethically it is unacceptable now to purchase ivory as they think it encourages elephant poaching. Although the number of foreign visitors from Europe, the USA and Canada (the main nationalities of ivory customers in the 1980s) have increased sharply to Zimbabwe from 104,091 in 1990 to 270,720 in 1996 (Zimbabwe Government, 1998), few are now buying ivory. According to the vendors, the few occasional westerners buying today are mainly a few French, German, Spanish, Italian and American tourists. Greater numbers of Chinese and Korean workers and Japanese tourists are coming to the country. Asian visitors have risen from 3,458 in 1990 to 21,425 in 1996 (Zimbabwe Government, 1998). As a result, there

has been a greater number of chopsticks and name seals made and offered for sale in Harare since 1990.

Foreign diplomats have been major buyers of ivory in Zimbabwe since at least the 1980s up to the present. Foreign diplomats are today some of the largest buyers of ivory commodities on the continent. The managers of the ivory retail shops specified diplomats from France, Japan, Korea and China as being buyers of ivory in Harare in 1998.

Most of the larger retail ivory outlets in Harare had improved sales in 1998 compared to 1997. Three proprietors who owned seven retail shops displaying 12,446 ivory items (i.e. 62% of Harare's total) said that the ivory business was either the same as in 1998 or better than in 1997. One commented that the reason his business had increased since 1997 was that some of his customers thought that the ivory ban had been lifted for Zimbabwean ivory and wrongly assumed that imports into the consuming countries were now legal.

Table 20
Average retail prices for ivory items in Harare in July 1999.

Item	Size in cm	Fixed Z \$ price	Converted US \$ price
Ring	0.8	32	0.86
Broach pin	5	100	2.70
Buddha	4	110	2.97
Key chain, carved animal	3	114	3.08
Earrings, pair	2.5	120	3.24
Paperknife, malachite handle	12	158	4.27
Wild animal, poorly carved	5	221	5.97
Human figure, poorly carved	6	250	6.76
Napkin ring	5	490	13.24
Paperknife	10	500	13.51
Hair clip	10	510	13.78
Name seal	7.5	550	14.86
Candlestick	7.5	699	18.89
Chopsticks, pair	30	700	18.92
Chess set, white pieces	2.5	1,180	31.89
Belt buckle	7	1,295	35
Bangle, carved	2.5	1,343	36.30
Lidded box	6	1,397	37.76
Necklace, beaded		1,500	40.55
Wild animal, well carved	12	4,550	123
Rose, 100 g of ivory with gold	60	5,500	149
Lamp	45	19,546	528
Miniature Mercedes of 1904	17	24,700	668
Bust, well carved	30	33,480	905
Bridge, carved full tusk	90	48,950	1,323
Tusk, polished, 15kg		90,000	2,432

Ivory workshops in Harare

According to the Chairman of the Zimbabwe Ivory Manufacturers Association, Jason Cambitzis, there are about 30 ivory craftsmen in all of Zimbabwe, which is probably a slight underestimate. Most work in Harare and a few others in Bulawayo. There is nobody crafting ivory at Victoria Falls, the main tourist destination in Zimbabwe (J. Cambitzis, pers. comm., July 1999). In 1983, for comparison, there were about 200 craftsmen in the country consuming about 15 tonnes of raw ivory a year (Martin, 1984). The number of craftsmen has fallen sharply because of the 1990 CITES international ivory ban.

Most of the artisans carry out their profession on premises owned by some of the larger retailers of ivory items. In July 1999 the investigator was able to record 26 ivory craftsmen working for six different proprietors of souvenir shops in Harare. Probably all the ivory craftsmen were Zimbabwean. They are paid a salary or piece rate. Salaries range from Z \$500 (US \$13.51) to Z

\$1,900 (US \$51.35) a week with an average of Z \$983 (US \$26.58). These earnings, converted into US dollars, are about a quarter of what they earned in 1983 (US \$110) due to the severe devaluation of the Zimbabwe currency and because the quality of workmanship has declined. There are two main reasons for the poorer workmanship. Fewer carvers are involved so there is less competition amongst them to make high quality carvings, and there are fewer discerning buyers with almost all the collectors having stopped buying.

The exception to the general decrease in the quality of new ivory work is to be found just outside Harare at the workshop of Patrick Mavros. Here, two ivory carvers, both Shonas, with the close supervision of Mr Mavros, produce only 20 high quality ivory carvings a year for sale, plus 30 necklaces, 30 bracelets and 10 belt buckles. In comparison, in 1991 Mr Mavros had four to five carvers making 260 high quality carvings a year to meet the larger market. He prefers ivory from female elephants which he believes is a more creamy-brown in colour and has a more pronounced honey-comb grain. Almost all his carvings are of wild animals: elephants, hippos, rhinos and even pangolins. The average size is 6 cm and retails for US \$650. The quality is excellent and could be the best in all of Africa. The carvers are paid a salary of Z \$5,000 (US \$135) a month. For comparison, the minimum monthly salary in April 1999 for a domestic worker was Z \$624 (US \$16.86). It takes about four days for a carver to produce one animal. All the pieces are on special order and are not on display in his show room. The main buyers of these small wild animals are Germans, Spanish and Italians (P. Mavros, pers. comm., July 1999).

On account of the collapse of sales of ivory pieces in Zimbabwe, Mr Mavros has moved into producing sterling silver pieces. The craftsmen make the moulds for his silver pieces out of ivory, but as he does not sell these, he has now accumulated several hundred. Mr Mavros finds silver a profitable alternative to ivory because there is no wastage, and silver does not crack. There is also no difficulty over government permits, and live animals are not killed to produce the raw material. However, aesthetically, Mr Mavros prefers to work in ivory as he believes it is such a beautiful substance.

Sources and prices of raw ivory in Harare

Almost all the ivory tusks bought by the workshop managers in Harare come from official sales carried out by the Department of National Parks and Wild Life Management. These sales to workshops have continued since the mid-1970s when Zimbabwe's modern ivory carving industry began (Martin, 1984). From 1991 to 1993 a yearly average of 4,487 kg of ivory was sold to registered ivory manufacturers in Zimbabwe (Cunliffe, 1994), and from April 1998 to the end of October 1999 Z \$20,900,000 worth of ivory was sold by the department to the locally registered manufacturers (Zimbabwe Government, 1999). Almost all was used in the local ivory crafting business.

When the department allows the sale of raw ivory, the sales occur all day on Wednesdays. The department, depending upon the weight and quality of the tusks, fixes the prices. During the first half of 1999, small tusks of 2-3 kg were sold per kg for about Z \$450 (US \$12.16), 6kg tusks for around Z \$540 (US \$14.59) per kg, 10-12 kg tusks Z \$650 (US \$17.57) per kg and 16 kg tusks for Z \$650-750 (US \$17.57-20) per kg. These prices are some of the lowest in Africa, for reasons mentioned earlier.

According to the *Zimbabwean Government Gazette*, 2nd July 1999, the prices for raw

Table 21
Gazetted prices for elephant ivory for local registered manufacturers from the stockpiles held by the Government of Zimbabwe from 1 July 1999.

Whole raw tusks — Grade A		
Weight in kg	Price per kg Z \$ price	Converted US \$ price*
0.5—1	600	16.22
1.25—6	900	24.32
6.25—10	1,100	29.73
10.25—15	1,200	32.43
15.25—20	1,250	33.78
20.25—25	1,300	35.14
25.25—33	1,450	39.19

Pieces of ivory

Tusk pieces were sold as per the above weight category but less 10% of the above charges.

Chips

Ivory chips per kg: Z \$180, US \$4.86.*

* US dollar equivalent as of July 1999.

Source: *Zimbabwean Government Gazette*, 2nd July 1999.

ivory were to be increased by approximately 100% in Zimbabwe dollars on 1 July 1999. The new prices are detailed in Table 21. But at the time of the investigator's departure from Harare on 25 July 1999 the new prices had not been implemented.

Besides the official government sales there are at least two other sources for raw ivory in Zimbabwe. One proprietor of an ivory business said he bought his stocks solely from Zimbabwean sport hunters with licences because the prices were lower than those of the government. In 1998 he paid only Z \$500 per kg for a tusk of 18-25 kg.

Secondly, some craftsmen buy ivory knowingly from traders who deal in poached Zimbabwean elephants. The main sellers of ivory carvings avoid this source as government control on ivory carvers and business are the strictest in Africa and because government ivory is cheap. According to many conservationists in Zimbabwe, elephant poaching has increased in 1998 and the first half of 1999, especially in the Zambezi Valley (Heath, 1999, and various Zimbabwean conservationists who wish to remain anonymous). Most informed conservationists estimate that at least 80 have been killed, mostly by Zambians who cross the Zambezi river. Although there has been a recent increase in elephant poaching in the Zambezi Valley, and perhaps elsewhere in the country as well, the numbers are very small, considering that there are over 65,000 elephants in Zimbabwe.

The price for poached ivory is very low in Zimbabwe. According to a former member of the Department of National Parks and Wild Life Management, who takes a special interest in elephant poaching, some illicit tusks (which are usually small) are taken from the Zambezi Valley to Harare; in early 1999 these were offered for only Z \$150 (US \$4.05) a kg. Probably few poached tusks enter the ivory carving business of Harare because the government officers dealing with illegal ivory are generally efficient and confiscate the tusks before they reach Harare.

Victoria Falls

Introduction

Victoria Falls was surveyed from 25 to 27 July 1999. Most foreign tourists who visit Zimbabwe go to Victoria Falls as it is the most popular tourist attraction in the country. The investigator carried out fieldwork at Victoria Falls from 25 to 27 July 1999. There is relatively little ivory for sale there, however, compared with Harare. There are several reasons for this. No ivory craftsmen produce ivory pieces at Victoria Falls.

Many of the tourists are South Africans and "backpackers" who do not buy ivory. And finally, the diplomatic community is not based at the Falls.

Retail outlets and prices for worked ivory at Victoria Falls

There are only eight shops (four in hotels) selling ivory in and around the Victoria Falls and two shops at the airport. These ten retail outlets were selling a minimum total of 517 pieces in July 1999. The most common ivory items for sale are key rings, jewellery, wild animals, and salt and pepper shakers (see Table 22).

Two-thirds of the ivory pieces for sale are displayed in the hotel shops. The largest quantity (160) was in the Victoria Falls Hotel; the

prices were the highest here as well. Overall, prices for ivory items are higher at Victoria Falls than in Harare, as are hotel charges, taxis and other services for foreign visitors.

Table 22
Average retail prices for ivory items at Victoria Falls in July 1999.

Item	Size in cm	Fixed Z \$ price	Converted US \$ price
Ring	0.2	26	0.70
Broach	5x2	36	0.97
Key chain, plain		154	4.16
Key chain, carved		218	5.89
Earrings, pair		500	13.51
Necklace, beaded		937	25.32
Wild animal	6.2	965	26.08
Paperknife	15	1,524	41.19
Lidded box, carved	5	2,130	57.56
Salt and pepper shaker	6.2x6.2	2,914	78.76
Choker necklace		3,252	87.89
Elephant	15	3,880	105
African male bust	11	5,500	149
Egg, painted	6	14,200	384
Candlestick for 2 candles	30	16,000	432
Tusk, carved	35	16,500	446

The main ivory customers are French, Spanish and Italian tourists. The investigator saw no chopsticks nor name seals for sale, although eastern Asian tourists do visit the Falls. Almost all the ivory items for sale originate from Harare and Bulawayo. No imported ivory objects were seen. Since the demand now for ivory items is so low, the souvenir shop owners see no reason to have large stocks.

References

- Cunliffe, R.N. (1994). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Zimbabwe*. WWF project paper No. 44, Harare, Zimbabwe.
- Gray, J. (1997). Report of the Tenth Meeting of the Conference of the Parties to CITES, *TRAFFIC Bulletin*, 17 (1), 5-19.
- Heath, D. (1999). From the Publisher, *African Hunter*, 5 (3), 3.
- Martin, E.B. (1984). Zimbabwe's Ivory Carving Industry, *Traffic Bulletin*, VI (2), 33-38.
- Martin, E.B. (1991). The effects of the international ivory bans on Zimbabwe's ivory industry, *Swara*, 14 (6), 26-28.
- TRAFFIC USA (1997). Summary Report on the 1997 CITES Conference, *TRAFFIC USA*, 16(2), 1-10.
- Zimbabwe Government, Central Statistical Office (1998). *Statistical Yearbook 1997*, Harare, Zimbabwe.
- Zimbabwe Government (1999). *Zimbabwean Government Gazette*, 2nd July 1999, Harare, Zimbabwe.
- Zimbabwe Government (1999). Proposal 11.23 to the Eleventh Meeting of the Conference of the Parties to CITES, Harare, Zimbabwe.

South Africa

The legal position of the ivory trade in South Africa

Domestic trade

in ivory in South Africa is legal, but because South Africa is a **Party to CITES since 1975**, all **imports** and exports of raw and worked ivory are illegal.

Johannesburg

Introduction

The investigator's most recent fieldwork was carried out in Johannesburg from 28 July to 5 August 1999. Although Johannesburg is the commercial capital and one of the largest cities in the country, the present ivory business in the city is almost dead, and most of the ivory goods for sale were made more than a decade ago. There are fewer ivory items for sale in Johannesburg than in Cape Town or Durban. This is because foreign tourists, who are the main buyers, now avoid visiting Johannesburg because of the serious crime and relatively few tourist attractions. Also, the largest employer of ivory craftsmen in South Africa in the 1980s, who employed 47 workers in ivory in 1983 at his workshop in Pietersburg (Martin, 1985), had to close it down in 1989, due to a severe drop in sales. His main office and retail shop are still located in Johannesburg and now he has only one craftsman due to the international ivory ban.

Retail outlets and prices for worked ivory in Johannesburg

There are 20 shops and stalls, seen by the investigator, selling ivory in Johannesburg today. These retail outlets offer 1,361 items with the majority being jewellery, small wild animals and busts.

The biggest retail shop, mentioned above, in an area of Johannesburg called Braamfontein, offers for sale 819 ivory pieces which constitute 60% of all the ivory items in the city. Retail and wholesale sales in the Johannesburg shop are down by over 95% compared with 1989 due to the lack of customers. Here, too, almost every item for sale (see Table 23) was made prior to 1990.

In the 1980s many foreign tourists used to visit this large shop, but now only a few a month come, partly because it is located in a dangerous and depressed part of Johannesburg, but mainly due to the collapse in demand for ivory. As sales are so poor, the owner has not increased prices in US dollars and in fact the prices in dollars are lower in 1999 than in 1989.

The remaining 40% of the ivory items seen for sale in July 1999 were mostly in the Sandton shopping centre, outside the Bruma flea market, and in some hotels in the northern suburbs of the city. In the Sandton shopping centre, there were the usual items

such as jewellery and animals, but also antique ivory items from China, Japan and Britain. One shop specialized in older Yoruba tribe pieces from Nigeria including a 70 cm carved tusk made into a horn called an *oliphant* which was priced at 18,000 rands (\$3,000), and a 50 cm carved tusk

Table 23
Average retail prices for ivory items in the Johannesburg shop that has over 60% of the city's ivory pieces in July 1999.

Item	Size in cm	Fixed rand price	Converted US \$ price
Bead	1.25	36	6
Earrings, pair	0.4	41	7
Bangle	1.25	150	25
Crocodile	25	180	30
Necklace, medium beads/size		180	30
Scrimshaw tip	14	180	30
Wild animal	5	200	33
Lighter	7.5	240	40
Napkin rings, six	2.5	240	40
Bust	25	300	50
Scrimshaw disc	12	450	75
Table 23 continued.			
Human figure	15	540	90
Buffalo, detailed	7.5	690	115

for 8,000 rands (\$1,333). Outside the Bruma flea market are more than 60 stalls which are managed by Congolese (from DRC), Kenyans, Malawians, South Africans and some other African nationalities. The Congolese were the only ones selling ivory items. They illegally bring them in, mostly from DRC by air, and they know that selling them is also illegal. At the time of the survey, three stall keepers at separate stalls sold ivory items. Two sold beaded necklaces for 90-150 rands (\$15-25), crudely carved tiny animals and African combs which were all made in DRC. The third offered for sale 11 bangles 2.5 cm to 3.7 cm wide, made in Malawi for 60 rands (\$10). And finally there were three shops in three of the more expensive hotels offering for sale 203 ivory items, mainly jewellery and small wild animals. Most of the stock is old, and the proprietors claimed that sales are very slow.

Ivory workshops in Johannesburg

Due to the collapse of South Africa's ivory market, few of the craftsmen there are now making ivory items. There is one artisan, mentioned earlier, who works part-time for the largest ivory company in South Africa, with its shop in Braamfontein. This craftsman is usually given 2-3 kg of raw ivory twice a month, from which he makes, using an electric drill, 25-30 small animals (elephants, owls, frogs, etc.). In early August 1999 he produced 61 tiny (1.25 cm) crudely carved elephants and one tortoise. He was paid 5 rands (\$0.83) per piece or 310 rands (\$51.67) for making all 62 pieces. Since the animals were so hurriedly carved, the craftsman probably spent no more than two weeks making them all. These are the only items the artisan now makes as they are the most in demand, being cheap and small and thus easy to hide in a tourist's luggage. In the mid-1980s when the South African ivory industry was prosperous, a skilled craftsman would earn about \$600 a month, but now this one carver produces small, poor quality pieces which are easier to sell and receives only about \$100 a month.

After these small animals are made, they are brought to the shop in Braamfontein and polished with a buff. They are then sold wholesale for 18 rands (\$3) each and retail for 27 rands (\$4.50) each. If the craftsman put more time into producing higher quality elephant sculptures, the price would have to be higher and even fewer people would buy them, according to the manager of the Braamfontein company.

The owner of this business possesses a stockpile of about two tonnes of raw ivory pieces, mostly tips. These are off-cuts from the raw ivory used before 1990. With this fairly large stockpile and with the collapse of the ivory market, the owner does not want to buy new raw ivory pieces or tusks. He claims that in the Johannesburg area, raw ivory has little value.

In order to survive financially, this company and others have had to diversify by using alternative raw materials for souvenirs. The Braamfontein company has seen its gross income from ivory sales fall from 90% in 1989 to only 1% in 1998 of its total souvenir sales. About 90% of its income now comes from wood carvings mostly brought by air from Kenya and by truck from Malawi. Even though there is a 30% import tax for Kenyan carvings, unlike carvings from Malawi and South Africa for which there is no tax, Kenyan carvings still compete well. The remaining 9% of the company's gross income comes from selling wholesale and retail ostrich eggs (5,000 were bought by the company in 1998 from South African ostrich farms for 12 rands or \$2 each); hippo tusks (which are bought from Malawi's Department of National Parks and Wildlife for 150 rands or \$25 a kg); warthog tusks (which are obtained often from Zimbabwe for 25 rands or \$4.17 to 80 rands or \$13.33 a kg); and some animal skins. Unlike

in Djibouti, Ethiopia and Zimbabwe, cat skins are not for retail sale in South Africa, but the company does sell a few skins from springbok, blesbok and zebra obtained in South Africa.

Cape Town

Introduction

The fieldwork was carried out in Cape Town from 6 to 11 August 1999. Cape Town is the major city for tourists in South Africa. As a result, some shops stock ivory commodities.

Retail outlets and prices for worked ivory in Cape Town

Cape Town has 33 shops with 2,036 ivory items displayed for sale, mainly for tourists, but attracting some residents as well. Most items are in the central business district, but there are eight shops with 482 items in the main shopping area called the Waterfront that was established in the early 1990s (see Table 24).

The usual ivory items (such as jewellery and animals) are for sale in the central area of the city. There are also at least seven antique shops, mostly in Long Street, which display for sale older pieces of ivory such as *ekipas* (decorated buttons) from the Ovambo women of Namibia, British Victorian knives, sculptures from DRC, and Japanese statuettes, cigarette holders and netsukes. The Waterfront shops are all relatively new and they display mostly jewellery, napkin rings, name seals and wild animals. There are several carved tusks as well, including a 90 cm tusk with wild animals carved on it, priced at 22,000 rands (\$3,667), the most expensive item for sale in Cape Town.

Business in ivory is poor. There are not many customers for ivory items in Cape Town, but some vendors mentioned German and Russian buyers. Most ivory items for sale are old stock, but at least two shop managers said they had bought a few new items from Leboa in Northern Province and Kruger National Park.

The vendors in South Africa do not aggressively try to sell ivory items to foreigners as they know that the export of them is illegal.

Many of them actually warn potential buyers with notices in their shops or by talking to them. South African retailers generally are the most honest on the continent with regard to explaining the legal position of the ivory trade to customers.

Durban

Introduction

The Durban survey was carried out from 12 to 15 August 1999. There are several families of Indian origin in Durban who have traditionally imported worked ivory items. Such items are still for sale, as well as ivory that was carved in South Africa, mostly before 1990.

Retail outlets and prices for worked ivory in Durban

Within one building in Durban are 3,115 ivory items, 78% of all the ivory pieces offered for retail sale in this significant tourist city and major port. Until recently, the building was called the Asian market but has been re-named the Victoria Street market. Inside are many shops run by Indians,

Table 24
Average retail prices for ivory items in Cape Town in August 1999.

Item	Size in cm	Fixed rand price	Converted US \$ price
Pendant, tiny	1.5	25	4.17
Bust	3	38	6.33
Ring, thin	0.2	40	6.67
Napkin ring	2.5	85	14.75
Name seal	7.5	89	14.83
Wild animal, small	2.5	113	18.83
Bangle, thin	0.62	120	20
Pendant, medium	3	120	20
Ring, thick	1	179	29.83
Spoon, African c. 1920	19	200	33.33
Necklace, small beads, medium		209	34.83
Bangle, medium	2	275	45.83
Cigarette holder, Japanese c. 1920	11	300	50
Paperknife	15	300	50
Wild animal, medium	7.5	391	65.17
Magnifying glass, ivory and tortoise shell	22.5	400	66.67
Ekipa (old carved button)	6	500	83.33
Lamp with carvings	15	750	125
Tongs, old	20	795	132
Broach, Victorian	7.5	875	146
Necklace, large beads, medium		920	153
Bracelet, medium		1,052	175
Aeroplane, from DRC	17.5	1,250	208
Knife, Victorian	18	1,865	311
Human sculpture, Japanese	12.5	3,500	583
Netsuke, Japanese	5	4,350	725
Tusk, polished, 6.5 kg		6,000	1,000
Tusk, carved	90	18,167	3,028

and 12 of them have ivory items for sale (see Table 25). Some of the most valuable ivory pieces in the country are found here, including the most expensive: a pair of carved tusks weighing about 25 kg each, fully but crudely carved in Tanzania, for 250,000 rands (\$41,667). In the same shop was a Chinese junk, about 90 cm long, that the Gujarati manager had bought in Hong Kong in 1973. Although there was a sign saying it was not for sale, he said he would consider a serious offer. On

Table 25
Average retail prices for ivory items in Durban in August 1999.

Item	Size in cm	Fixed rand price	Converted US \$ price
Ring, thin	0.2	35	5.83
Earrings, pair	1	40	6.67
Wild animal	7.5	250	41.67
Necklace, beaded, medium		895	149
Bust	12.5	1,150	192
Netsuke, modern Chinese	10	6,950	1,158
Tusks, pair for 50kg, carved		250,000	41,667

being asked how it could be legally exported, the owner said he could obtain a legitimate letter from a museum in the United States which would facilitate an export permit from South Africa.

Besides displaying the usual ivory items made in South Africa and Zimbabwe, the curio shop managers also offered pieces made in China, Hong Kong and Japan, such as magic balls and netsukes. The old name for this market is thus still appropriate.

When the ivory business was brisk during the 1980s in South Africa, ivory shop managers, as in this market, bought many ivory items from neighbouring Zimbabwe because they were cheaper and often better carved. By the early 1990s this trade stopped due to the collapse of the South African ivory business. Sales are now very poor for ivory in the Victoria Street market. One manager said in the next six months he expected no sales of larger ivory items and perhaps he might sell only one or two small pieces in his shop.

There are three shops selling 765 ivory pieces in a shopping complex called the Workshop in central Durban near the City Hall. One of the shops displays 727 of these items and employs one carver who is now 67 years old, originally from the Transkei. In 1989 the owner of this shop bought ivory items from four carvers, but now business is very poor. Most of the items are old stock dating back ten years or more and it is almost impossible to sell large pieces, according to the manager.

The remaining ivory items for sale in Durban, 109 pieces, are on display in five of the expensive hotels. Most of the pieces are jewellery.

According to ivory salesmen in Durban, most customers are French, German, Japanese and Taiwanese. Many people, according to the salesmen, do not think ivory is fashionable now, and others do not want to risk smuggling items to their home countries. To try to encourage sales, there are discounts of up to 50%.

Sources of illegal ivory in South Africa

From 1991 to 1996 South Africa was a major illegal entrepôt for ivory. The Endangered Species Protection Unit (ESPU), which is part of the South African Police Service, seized 10,830 kg of illicit ivory during these six years (see Table 26). Most were semi-worked name seals or blocks (30,916), made elsewhere in Africa, destined for the Far East, especially Japan, Taiwan and China. Although some partly completed name seals were made in South Africa in the early and middle 1990s, the great majority originated in West and Central Africa and in Zambia. They were taken by air or truck to South Africa from where transport connections by air or ship to the Far East are more frequent and reliable. When the South African authorities became more skilled at intercepting these semi-worked name seals, and with fewer South African vendors buying them due to the collapse of South Africa's market, the various traders in Africa sought new routes from their home countries to the Far East. From 1 January 1998 to 30 June 1999 the ESPU authorities (see Table 26) seized not a single name seal (block).

Although much less ivory has been passing through South Africa from Central and West Africa from 1997 to mid-1999 compared with the early 1990s, perhaps a decline of 80% (ESPU, pers. comm., 1999), there is still some raw ivory from neighbouring countries passing through South Africa to Portugal and elsewhere. Tusks are being smuggled into South Africa from Namibia (but

Table 26
ESPU confiscation of ivory from 1 January 1990 to 30 June 1999.

Year	Cases	Arrests	No. of tusks	No. of raw pieces	No. of blocks*	Processed items/ kg	Carcasses	Estimated weights of tusks, pieces, blocks and ivory items/kg
1990	1	2	6	0	23	0	0	44
1991	35	85	110	6	3,782	0	0	1,399.435
1992	89	165	295	34	1,204	0	0	4,550.883
1993	85	160	245	69	23,047	114.00	0	2,527.921
1994	58	97	83	45	2,580	0	0	1,314.987
1995	64	79	110	24	6	0	0	1,116.660
1996	69	35	95	30	297	11.52	0	920
1997	42	55	34	25	224	40.23	0	337.140
1998	19	38	53	8	0	0	1	295.481
1999	20	30	20	12	0	0	0	194.539 to 30 June
Total	482	746	1,051	253	31,163	165.75	1	12,701.046

* Semi-worked name seals.

Source: ESPU, unpublished, 1999.

the origin is Angolan), Botswana (from Zambia) and Mozambique (ESPU, pers. comm., 1999). Small quantities of worked ivory are still arriving from DRC, Gabon and Mozambique.

The very few elephants poached each year in South Africa are essentially those in Kruger National Park, and only 20 are known to have been illegally killed there between 1995 and 1998 (South Africa Government, 1999). The poachers are almost all from Mozambique (ESPU, pers. comm., 1999). Some raw ivory is smuggled into the KwaZulu-Natal Province adjacent to Mozambique. About 95% of this ivory is from Mozambique (Investigations Unit, KwaZulu-Natal Nature Conservation Service, pers. comm., 1999). The few illicit tusks that are not seized by the authorities are usually crafted into items in South Africa, but the KwaZulu-Natal regulations do not allow even legal tusks to be worked as the authorities believe they could not control the craftsmen (S. Pillinger, Wildlife Investigator, KwaZulu-Natal Nature Conservation Service, pers. comm., 1999).

References

- Martin, E. (1985). South Africa's Ivory Carving Industry, *Traffic Bulletin*, VII (1), 12-15.
- South Africa Government (1999). Prop. 11.20 to the Eleventh Meeting of the Conference of the Parties to CITES, Pretoria, South Africa.

Mozambique

The legal position of the ivory trade in Mozambique

Mozambique joined CITES in 1981, and from that date all international trade in elephant ivory was prohibited. The internal trade in raw ivory within Mozambique is also illegal, but the internal trade in worked ivory items is legal (H. Dublin, pers. comm., 2000).

Maputo

Introduction

The fieldwork in Maputo took place from 16 to 21 August 1999. Maputo, Mozambique's capital, is by far the largest city in the country with the best hotels, roads, electricity and water. Most tourists and businessmen stay in Maputo and there are many souvenir outlets.

Retail outlets and prices for worked ivory in Maputo

Unlike the other places studied in this report, almost a third of the ivory items for sale in Maputo are displayed on the pavements or in temporary stalls. There are 23 such outlets mainly near the hotels in the upper part of the city, displaying 1,059 ivory items, while the 29 shops have 2,560 items. The most popular pieces are butter knives, amulets, paperknives, jewellery, wild animals, wooden boxes with ivory inlay, human figures and carved or polished tusks (see Table 27).

Table 27
Average retail prices for ivory in Maputo in August 1999.

Item	Size in cm	Starting meticaais (mt) price	Converted US \$ price
Ring, thin	.3	33,333	2.59
Butter knife	9	79,444	6.18
Earrings, pair	3	100,000	7.78
Amulet	2.5	101,750	7.92
Necklace		150,000	11.68
Pin/broach	5x2.5	160,000	12.45
Paperknife	11	176,667	13.75
Picture frame, circular	7	180,000	14
Hair clip	12	200,000	15.56
Key chain	3	220,000	17.12
Chopsticks, pair	24	275,000	21.40
Necklace, beaded, medium		315,464	24.55
Candlesticks, pair	20	325,000	25.29
Egg	6	345,000	26.85
Wild animal	10	350,000	27.24
Lidded box with ivory inlay	11x11	359,333	27.96
Walking stick handle	10	400,000	31.13
Spoon	9	449,750	35
Bangle	2.5	462,437	35.99
Human figure	10	856,625	66.66
Pipe	10	963,750	75
Crucifixion	12	1,050,000	81.71
Domino set, medium		1,670,500	130
Liddedbox, all ivory	12x10	3,033,500	236
Tusk, carved	37	3,860,833	311
Tusk, polished	55	7,250,000	564

The vendors craft many of the items themselves. The quality of the workmanship is generally poor, but some of the wild animals are well carved. In the informal outlets, there are more wooden carvings than ivory and they sell better. Nothing has a marked price and bargaining is the rule, not the exception. The main buyers are Portuguese, Italians, Spanish and a few South Africans. The people, almost all men, who sell items on the pavement put out their displays between 9.30 and 10.00 in the morning, and at sundown pack them into cartons to store nearby or take home until the following day.

The second most numerous retail outlets are those at Maputo 's airport. There are eight vitrine cases, unmanned but with labels giving contact telephone numbers, and there are five shops. Several proprietors selling 1,023 items in total own these 13 outlets. There is even a shop inside the duty free area and a vitrine case in the VIP lounge after the traveller has completed all Immigration and Customs formalities. The same items seen on the pavements and street stalls are sold at the airport outlets, but there are far fewer ivory boxes. Generally, prices are significantly higher at the airport than in the city. The most expensive item displayed for sale at the airport was a 30 cm long rhino for 10,140,000 meticaís (mt) or \$789. Some of the airport outlets are branches of souvenir shops in central Maputo. The presence of such a large variety and number of ivory items at an international airport is very unusual, especially when the laws do not allow them to be exported.

The *Mercado Central* or Central Market has three shops offering for sale 847 ivory items. One of the shops displays 831 pieces. The owner is a Muslim Indian whose family came from Nampula in the north. In his shop the most prevalent ivory items are wild animals, boxes and human figures. They were crafted about two to seven years ago. The most expensive piece is a 90 cm long carved tusk for 12,000,000 mt (\$934). The main buyers are Portuguese and Italians.

The remaining ivory items for sale in Maputo are in shops outside the hotels (six with 317 items), in the hotel shops (seven with 258 items), and in the *Cooperativa de Producao Artesanal Arte-Makonde* (115 items). The quality is the highest in the Co-operative and prices there are the most reasonable. For example, a ring costs 25,000 mt (\$1.95), and a larger carved animal costs a third to a half of those found in some other Maputo retail outlets.

Ivory workshops in Maputo

Small ivory workshops with one or two craftsmen can be found beside the pavement displays and stalls, but there are also some craftsmen who work at home. There are at least 100 craftsmen working in ivory and wood in Maputo. The largest workshop by far (and the only ivory Co-operative) is the *Cooperativa de Producao Artesanal ArteMakonde*. This Co-operative was established in 1979, when most of the workers were political prisoners. The ivory pieces were sold to a state-owned gallery in Maputo. The raw ivory came from the government, so the whole enterprise was essentially a government one. In 1987 the government stopped selling tusks to the Co-operative, so the officials have had to buy from private people since then. In 1999 the Co-operative paid on average 250,000 mt (\$19.46) per kg for a tusk of approximately 5 kg.

The Co-operative has 34 workers, reduced from 46 in 1986. They mostly come from the town of Mueda near the Tanzania border in Cabo Delgado Province. Mueda has a tradition of ivory carving and many of the craftsmen are of the Makonde tribe. Most of the craftsmen at the Co-operative use wood, but all of them can work ivory as well. In August 1999, 13 craftsmen were working mostly in ivory. The remaining artisans were on holiday. The men work from 7.00 am until midday and then from 1.30 pm to about 4.00 pm. Instead of receiving a salary, on finishing an ivory or wood item, the craftsman immediately receives 10% of the retail price. In addition, at the end of the month the net profits are split up amongst all the craftsmen in the Co-operative. A craftsman earns about 800,000 mt (\$62.26) to 900,000 mt (\$70.04) a month, of which about 300,000 mt (\$23.35) would be the 10% payments.

All the pieces are sold in a show room at the Co-operative, which also displays a much larger quantity of wood carvings. No ivory items are sold wholesale to other outlets. As there is competition among the craftsmen in the Co-operative, they produce relatively high quality pieces. As well as electric drills, they use hand tools for the final detailed work. According to the accountant, the sales of both wood and ivory objects have been fewer in 1999 than in the same period in 1998, but he could not give an explanation why.

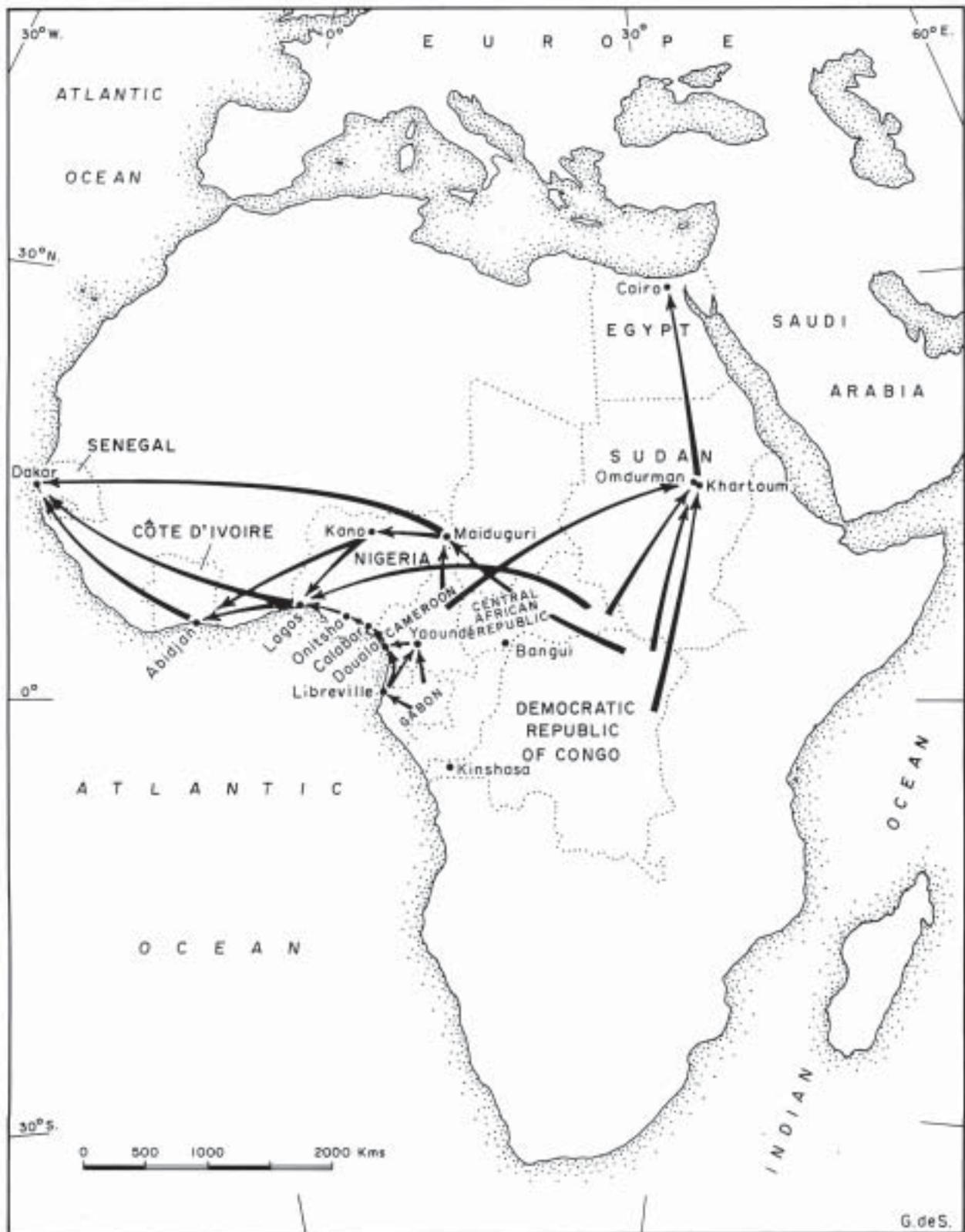
Sources and prices of raw ivory in Maputo

The ivory craftsmen resident in Maputo state that all the raw ivory comes from elephants in Mozambique, especially in the north. Many tusks come from Cabo Delgado Province. There are still craftsmen in the towns of Mueda and Pemba practising the ivory carving trade.

Raw ivory prices are cheap in Maputo (see Table 28). One probable reason for the low prices is that elephant poaching is relatively easy and the chances of being arrested quite low. This is because government personnel are unable to patrol the elephant areas adequately due to lack of resources and motivation. The government officers do not check the origin of the tusks for the Maputo carving industry so middlemen can move the tusks into the capital quite easily and sell them to workshop owners and individual craftsmen without fear of being apprehended. Prices are also low because foreign tourism has not yet become important to the Mozambique economy as civil war only ended in 1992. Few tourists visit the country, especially the north due to the deteriorated infrastructure. In Maputo, hotels and museums are being renovated, and if the country remains politically stable, it is expected that many more visitors will come. Whether the sale of ivory items will then increase substantially will depend on the nationalities of the future tourists. Presently, with few tourists, sales are low in Mozambique, although prices are reasonable compared with elsewhere.

Table 28
Prices paid by craftsmen in Maputo for raw ivory in 1998 and 1999.

Tusk	1998		1999	
	Mt price	Converted US \$ price	Mt price	Converted US \$ price
Small tusks less than 5 kg	?		180,000	14.01
Medium sized tusks, usually 6 to 10 kg	125,000	12.50	213,000	16.58
Large tusks over 20 kg	350,000	35	500,000	38.91



Known movements of elephant tusks within West, Central and North-East Africa in the late 1990s.

Results

As well as the 13 countries studied for this survey in 1999, results of surveys in Egypt and Sudan undertaken by one of the investigators in the late 1990s are included in the Tables.

Current status of the ivory trade

In Table 29 presented below, the investigators have aggregated the data for cities in 15 countries on the African continent to produce figures for the total number of outlets, workshops, craftsmen, and items for sale. Also, the average prices are given for various weights of raw ivory in most major cities. Table 30 gives the retail price for ivory items in West and Central Africa in 1999.

Prices for raw and worked ivory have been given in this report in local currencies and US dollar equivalents at the time the price was recorded. Since these currencies fluctuate against the US dollar, the dollar price of ivory is variable. Often, when a currency devalues quickly, inflation does not move as quickly and there can be drops in the price of ivory in dollar terms even though the price rises in local currency terms. An example of this was the precipitous 50% devaluation of the CFA franc in 1994. This devaluation might still be affecting the price of ivory today, as worked pieces manufactured prior to 1994, or made from ivory purchased before 1994, and sold today would have to be 100% more expensive in CFA francs just to break even in US dollar terms, not even taking into account inflation due to other causes since then. This could be a factor helping to explain why some worked ivory seems to sell at or less than current raw ivory prices in places affected by the CFA franc, including Nigeria.

Table 29
Data for various indicators of the ivory trade and prices for raw ivory mostly in 1999.

City	Outlets	Workshops visited	Craftsmen	US \$ prices for raw ivory			Min. no. items	Weight kg
				<1 kg	1-5 kg	>5 kg		
Dakar	30	2	4	100-120?	4,338	407		
Abidjan	52	14+1?*	97+10?*	41	41-58	65-80	20,114	2,748
Lagos	40	5+1?*	33+10?*	<50	46-50	50	5,966	1,742
N'Djamena	24	0	0				1,000+	33+
Douala	28	7+6?*	32+12?*	<27	27-30	30-50	4,891	510
Yaounde	15	1?*	6?*	<30	38	38-50	1,124	144
Libreville	8	0	0	<30	30	42	462	44
Bangui	26	3	12+10?*	<15	15-20	20-25	2,219	211
Kinshasa	28	13	116	30	30-50	>50	4,324	485
Djibouti-ville	18	0	0		68		453	
Addis Ababa	54	4+2?*	10-20	28	37	53	9,996	
Cairo**					80	137		
Cairo, 1998	88	6+4?*	100	34	62	98	11,627	
Luxor, 1998	33	0+1*	<12				6,445	
Aswan, 1998	21	0	0				3,388	
Omdurman & Khartoum 1997	34	3	<20	15	44		1,500-3,000	
Harare	23	1+6*	30	8	12	17	19,958	
Victoria Falls	10	0	0				517	
Johannesburg	20	0	0				1,361	
Cape Town	33	0	0				2,036	
Durban	20	0+1*	1-3				3,989	
Maputo	52	8+?	100	14	28		3,619	
Totals	657	67+22*	573-583+42*				109,327-110,827	

* Workshops and craftsmen told about but not visited.

** The investigator again visited Cairo in late 1999 working on a different project, but collected some ivory data.

Table 30**Average retail price comparisons in US dollars for ivory items, after bargaining, in Central and West Africa in 1999.**

Item	Size/description	Kinshasa	Bangui	Libreville	Douala
Necklace	small	5.00	2.50-4.90	-	4.90
	large	10-12	9.80-13	8.20-14.75	8.20-16.40
Bracelet	rosaries	-	-	-	4.90
	<1 cm	2-5	1.60	3.30	1.60-3.30
	1-2.5 cm	3-10	3.30	-	3.30-16.40
Animal	>2.5 cm	10-15	3.30-4.90	8.20	8.20-19.70
	5-10 cm	15-30	4.10-8.20	2-4	4.90-19.70
	10-20 cm	20-50	4.10-29.50	4.10-14.75	4.90-19.70
Lobster	40-50 cm	?	-	-	-
	30-40 cm	150.00	-	-	-
Bust	5-10 cm	15-100	8.20-14.75	-	9.80-24.60
	10-20cm	50-150	11.50-24.60	-	19.60-65.60
	20-30 cm	60-150	27.90	24.60	98.40-164
Figurine	10-20 cm	?	11.50	9.80	19.70-24.60
	40-50 cm	60-250	-	-	65.60-131
	50-60cm	?	-	-	115-246
Mask/profile	5-10 cm	-	2.50-3.30	-	6.609.80*
	10-20 cm	?	4.10	-	6.60- 14.75*
Carved tusk	1-2kg	75-100	24.60	-	49.20-148
	2-3 kg	?	-	-	131.00
	4-5kg	?	-	-	-
Polished tusk	1-2 kg	50-70	-	-	-
	2-3 kg	60-150	49.20	-	-
	4-5kg	-	-	-	-
Fruit per piece	3-8 cm	-	0.27-0.55	1.60-2.50	-
	4-25 cm	33.00	-	6.50	-
Box	<10 cm	10.00	3.30-4.90	4.90	-
	>10 cm	-	4.90-8.20	-	16.40
Comb	<10 cm	-	-	4.10	4.10
	>10 cm	-	4.90	-	6.60-9.80
Hair clip		2.00	.80-1.60	-	1.60-3.30
Chopsticks	(per pair)	-	-	-	4.90
Name seal	6-8 cm	-	-	4.90-6.60	-
Necklace	small	4.90	3-8	6.55	8.20
	large	3.30-9.80	8-15	9.80	8.20-13.10
	rosaries	4.90	4-10	8.20	16.40
Bracelet	<1 cm	1.15-1.60	2-4	1.60	2-2.50
	1-2.5 cm	3.30-4.90	2-7	4.10-8.20	4.90-9.80
	>2.5cm	4.90-8.20	3-10	4.90-11.50	8.20-13.90
Animal	5-10 cm	3.30-14.75	3-15	8.20-16.40	4.90-8.20
	10-20 cm	3.30-14.75	3-15	8.20-16.40	4.90-8.20
	40-50cm	-	150.00	82-295	-
Lobster	30-40 cm	65.60	50.00	49.20	98.30
Bust	5-10 cm	4.90-9.80	10-15	6.60-24.60	9.80-29.50
	10-20 cm	16.40-32.80	10-50	16.40-82	29.50-98.40
	20-30 cm	-	25-180	65.60-148	82-164
Figurine	10-20cm	16.40	10-40	16.40-39.30	24.60-49.20
	40-50 cm	-	75-200	65.60-164	98.40-197
	50-60 cm	-	100-250	65.60-180	197
Mask/profile	5-10 cm	3.304.90*	2-8	4.90	4.90-8.20
	10-20 cm	8.20*	5-8*	8.20-14.75	9.80
Carved tusk	1-2 kg	41-98.40	40-100	41-98.40	65.60-148
	2-3 kg	73.80-115	75-120	98.40-148	148-197
	4-5 kg	-	200-250	197-295	328.00

Table 30 continued

Item	Size/description	Kinshasa	Bangui	Libreville	Douala
Polished tusk	1-2 kg	-	45-75	41-82	65.60-131
	2-3 kg	49.20-82	80-120	82-131	131-197
	4-5 kg	131.00	-	-	295-361
Fruit per piece	3-8 cm	0.82	1.25	1-3.30	2.50-8.20
	4-25 cm	-	12.50-25	16.40-24.60	14.75-26.20
Box	<10 cm	-	5-8	11.50	11.50
	>10 cm	-	19.70	19.70	19.70
Comb	<10cm	1.60	1-2	2-3.30	4.90
	>10 cm	4.10	3-8	9.80-14.75	13.10
Hair clip		0.80-1.60	1-2	1.60-3.30	2.50-3.90
Chopsticks	(per pair)	4.90	4.00	3.30	4.90
Name seal	6-8 cm	-	2.50-3	4.10-4.90	4.10-4.90

* Profiles only.

N.B. Converted to US dollars at prevailing exchange rates.

Another factor influencing the determination of the US dollar price of ivory is the choice of which exchange rate to use. There is the global market exchange rate, the local bank exchange rate, and the street value exchange rate. These three rates can be as much as 10-30% different from one another, depending on whether cash or travellers' cheques are being changed and whether one is changing in a bank or with legal or illegal money changers. The rate used for Central and West Africa was an average of the most common method(s) of changing money in the particular city. For example, for Libreville 600 CFA to the US dollar was used and for the other CFA countries 610 CFA to the US dollar was used, although in Douala it was possible to get up to 630 CFA per US dollar on the street in June-July 1999.

Concerning the prices of each type of ivory object, care must be taken not to accept the prices as exact. Prices are dependent upon the type of person buying (a local customer, a foreign tourist, a wholesaler, etc.), the amount of business done that day, the time of day and other factors. Daniel Stiles has often stated in his Tables a starting price given to him by a vendor and a final price after bargaining. In the countries visited by Esmond Martin, prices were generally negotiable in Djibouti, Ethiopia and Mozambique where bargaining can reduce starting prices by around 30%, but in Zimbabwe and South Africa, most prices are fixed.

The authors of two earlier reports, *The Impact of the Ivory Ban on the Illegal Hunting of Elephants in Six Range States in Africa* (1992), and *Four Years After the CITES Ban: Illegal Killings of Elephants, Ivory Trade and Stockpiles* (1995) were also concerned about the consistency and quality of their pricing data for ivory commodities (H. Dublin, one of the authors of both reports and Chairperson of the IUCN/SSC African Elephant Specialist Group, pers. comm., 2000). Thus, the retail prices for items mentioned in these two earlier reports and in this one should be treated with some circumspection.

References

- Dublin, H. and Jachmann, H. (1992). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Six Range States in Africa*, WWF, Gland, Switzerland.
- Dublin, H., Milliken, T. and Barnes, R. (1995). *Four Years After the CITES Ban: illegal Killings of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.

Ivory Trade in Africa in 1999 compared with the 1980s

The data collected in this study can be compared with similar data gathered in past years to determine how the ivory trade has been changing since the CITES ivory ban in 1990. Unfortunately, the data in published and unpublished reports are not complete enough to allow full comparison. Several relevant conclusions can be reached, however, for some African cities. In addition to the 13 African countries surveyed in 1999, information on Egypt and Sudan are again included from earlier work undertaken by one of the investigators to give a more comprehensive understanding of the ivory trade on the continent.

Table 31 presents data for certain cities on the prices of raw ivory, numbers of workshops and the numbers of ivory craftsmen, comparing 1989 with 1999. Table 32 presents the prices of selected ivory items in certain cities for various years. Generally, there has been a significant decline in the prices of tusks and of ivory items from 1989 to 1999, strongly suggesting a decline in demand.

Table 31
Ivory trade indicators, comparing mid-1989 with mid-1999.

City	US dollar price (>1 kg)		Number of retail outlets		Number of workshops		Quantity for sale	
	1989	1999	1989	1999	1989	1999	1989	1999
Abidjan	-	40-80/kg	56-61	37	12	14	4,880 kg	2,748 kg
Lagos	14-29/kg	46-50/kg	34	35	-	6	1,081.5kg	1,742 kg
Douala	65-81/kg	27-50/kg	~50	21	>3	>7	880 kg	510 kg
Yaounde	-	38-50/kg	15	14	-	1?	610 kg	144 kg
Libreville	45-65/kg	30-42/kg	>48	~10	>9	0?	740 kg	44 kg
Kinshasa	40-50	30-50/kg	-	30	21	13	-	485 kg
Harare	105	16	-	-	-	7	-	-
Johannesburg	-	-	-	-	-	0	-	-
CapeTown	-	-	-	-	-	0	-	-

Table 32
Average retail price comparisons in US dollars for ivory items, at starting prices for various years.

Ivory item	Lagos		Libreville		Douala and Yaounde	
	1989	1999	1989	1999	1989	1999
Necklace, large	20.95	8-35	32.40	13.10-36.10	32.40-48.40	12.30-41
Bracelet <1cm	11.40	4-15	16.10	9.80-13.10	12.60-14.50	4.90-9.80
Bracelet >2.5 cm	28.60	5-50	45.20	19.70	19.35-48.40	9.80-41
Earrings	2.90-5.70	0.50-10	3.20-9.70	1.60	6.45-9.70	1.60-8.20
Humanfigure 10-20cm	210	25-150	-	24.60	113	41-164
Human figure 30-40 cm	476	40-400	194	32.80-82	226	57.40-98.40
Animal 20-30 cm	-	25-250	80.65-135	49.20-65.60	194	131-246
Carved tusk 50cm	-	50-300	565	-	194	148-557

N.B. US \$1=310 CFA in 1989 and 600-620 CFA in 1999 (Libreville, Douala and Yaounde). US \$ 1=N 10.5 in 1989 and 100 N in 1999 (Lagos).

Table 32 continued.

Ivory item	Addis Ababa		Ivory item	Harare		Ivory item	Johannesbur	
	1993	1999		1983	1999		1983	1999
Comb 11 cm	30	10	Animal 2.5 cm	7	2.43	Necklace, beaded	60	30
Pipe 11-20cm	71	25	Animal 4cm	18	3	Lighter	45	40
Female bust 12 cm	121	81	Key chain	4-8	3.08	Napkin rings, 6	45	40
Bangle .7 cm	8	4	Bangle .7 cm	10	-	Bangle 1.25 cm	45	40
			Broach, small	8	3			

N.B. US \$1 = 4.95 birr in 1993 and 8 birr in 1999 (Addis Ababa).

US \$1 = Z \$1 in 1983 and Z \$37 in 1999 (Harare).

US \$1 = 1.07 rands in 1983 and 6 rands in 1999 (Johannesburg).

Using the information in Tables 31 and 32, trends and changes in the ivory trade of the regions studied can be determined. Points to be noted are listed below.

Central and West Africa

1. The raw ivory price is higher now in Lagos than it was in 1989, indicating that the ivory demand is fairly strong there today.
2. The quantity of ivory displayed for sale and the number of ivory outlets in Lagos are greater today than in 1989, again supporting the conclusion that ivory demand is probably stronger there now than ten years ago.
3. The price of raw ivory is lower today than in 1989 in Douala and Libreville, suggesting that demand has decreased. Data are not available for other cities in Central and West Africa.
4. The number of ivory outlets and the quantities of worked ivory displayed have decreased substantially in Abidjan, Douala, Yaounde and Libreville between 1989 and 1999, suggesting that ivory demand has decreased. The number of ivory carving workshops has marginally increased from 12 to 14 in Abidjan, but this could be because the four Abobo workshops were not found by the 1989 investigators. Ivory demand has also decreased in Bangui and Kinshasa over the last ten years. The decrease in ivory carving workshops in Kinshasa supports this.
5. Libreville and Yaounde present clear evidence that worked ivory prices are lower in 1999 than in 1989, supporting the view of decreased demand since the ban. Evidence from Lagos is less clear, and no conclusions can be reached on the basis of worked ivory prices.
6. Taken as a whole, the data suggests the demand for worked ivory is lower in all cities except Lagos in 1999 than in 1989. Only in Lagos has the demand possibly increased a little. No comparative data are available for Dakar.
7. Following a sharp drop in ivory demand and prices after the CITES ban in 1990 (Dublin and Jachmann, 1992; Dublin et al., 1995), ivory demand has made a partial recovery today everywhere except Libreville, the only place where the internal trade in ivory is banned. Lagos is the only place where demand seems to be higher today than in 1989.

North-East Africa

1. The retail sales of worked ivory in Djibouti have declined over the past decade but by what percentage is not known due to lack of earlier data.
2. In Addis Ababa, retail sales of ivory items declined significantly from 1989 to 1998. Comparing the first half of 1998 with same period in 1999 there has been a collapse with hardly any items

selling due to the absence in foreign tourists. In early 1999 the sales had fallen by over 90% compared with 1988.

3. The US dollar price for tusks in Addis Ababa in 1999 was roughly the same as in 1993 (when a survey was undertaken), but if inflation is taken into consideration the price has fallen.
4. The retail prices for most ivory objects in the shops in Addis Ababa have declined in US dollars from 1993 to 1999 due to the collapse in demand and decreased value of the local currency.
5. In Addis Ababa there are fewer craftsmen working in ivory now compared with 1993 due to the decline in sales of finished products.
6. The number of craftsmen working in ivory in northern Sudan has declined by over half from 1989 to 1997. The price of raw ivory in northern Sudan, however, doubled between 1996 and 1997.
7. Sales of worked ivory items in Khartoum and Omdurman have fallen by over half from 1989 to 1997 due to the decline in demand.
8. The number of ivory craftsmen in Egypt has declined significantly from 1989 to 1999.
9. The retail and wholesale sales in ivory have also declined in Egypt from 1989 to 1998. With the increase in the number of foreign tourists in 1999, however, ivory sales rose compared with 1998. The prices for raw ivory bought by workshop owners in Cairo also increased in 1999 compared with the year before by around 20%.

Southern Africa

1. The retail sales of ivory souvenirs have fallen by over 90% in Zimbabwe since 1989 due to the lack of buyers. Sales in several of the largest shops in Harare, however, have increased in the first half of 1999 compared with the same six-month period in 1998. This is because in 1997 non-commercial, worked ivory from Zimbabwe was put on Appendix II allowing tourists to export it (although most countries do not allow its import). Also, some western tourists now incorrectly believe, due to some faulty or ambiguous NGO and media coverage, that the ivory from Zimbabwe can be imported legally into their home countries following the CITES decision to allow the ivory auction to Japanese traders.
2. The number of ivory craftsmen in Zimbabwe has declined from over 200 in 1989 to less than 40 in early 1999; most now work primarily in wood.
3. The prices of raw ivory offered for sale by Zimbabwe's Department of National Parks and Wild Life Management to local buyers have decreased in US dollars by more than 85% over the past decade.
4. The prices for worked ivory items have declined in Zimbabwe over the past decade for three main reasons. There is now little demand by buyers. The price of raw ivory from the government, if converted into US dollars, has sharply declined. The massive devaluation of the Zimbabwean currency in 1998 has made prices for ivory items inexpensive in US dollars.
5. Sales of ivory items have collapsed in South Africa from 1989 to 1999 for the same reasons as for Zimbabwe. Sales have declined by over 80% in the country as a whole, and especially in Johannesburg.
6. The number of ivory craftsmen has also severely declined in South Africa, with very few working full time in ivory today.

7. There is little demand for raw ivory in South Africa as there are large stocks of worked ivory which hardly sell. Prices for tusks have declined sharply from 1988.
8. With the collapse of the ivory market in Zimbabwe and South Africa, the quality of the carvings made recently has deteriorated. Some new pieces are crudely made.

References

- Dublin, H.T. and Jachmann, H. (1992). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Six Range States in Africa*, WWF, Gland, Switzerland.
- Dublin, H.T., Milliken, T. and Barnes, R.F.W. (1995). *Four Years After the CITES Ban: Illegal Killings of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.

Discussion

This study is the first aimed at quantifying the number of ivory pieces offered for retail sale in the major ivory markets of Africa, and recording the number of retail outlets and ivory workshops in the countries surveyed. The study not only examines the retail but also the wholesale commerce of ivory items in Africa and documents the trade routes for raw and worked ivory within Africa and beyond. The purpose of this study is to provide baseline statistics on the ivory markets of Africa and the trade in ivory objects in mid-1999 in order to appraise in the future changes in supply or in demand for ivory. In particular, conservationists consider it important to find out whether the authorization by Party states to CITES to hold one-off controlled sales of raw ivory stocks in certain African countries stimulates ivory demand. In April 1999 the first of these auctions took place in Namibia, Botswana and Zimbabwe. Will these sales increase the price for raw ivory and thus increase the pressure to poach more elephants? Follow-up surveys in these countries and proper analysis of the data for future years will enable conservationists and government officers to make rational decisions from the surveys on whether future ivory sales should be allowed.

Retail sales of ivory items in Africa

In Africa there are at least 109,000 items displayed for retail sale, which were counted in the 17 main cities of the 13 countries visited during this survey, plus Sudan and Egypt surveyed earlier (referenced in the Methodology section). The actual sale of worked ivory is slow everywhere, however, except for Lagos and Abidjan. The city with the largest number of displayed worked ivory objects is Abidjan (20,114 pieces) followed by Harare (19,958), Cairo (11,627), Addis Ababa (9,996), Luxor (6,445) and Lagos (5,966). Retail sales are down in north-east and southern Africa compared with the late 1980s by 65-95% in most of the cities. This is due to the ivory bans in 1989 in Europe, USA and Japan, the CITES ban of 1990, and most importantly, the immediate decline in demand from late 1989 from former customers who believed it was no longer fashionable nor morally correct to buy ivory.

One of the main findings of this study is that diplomats, personnel from international organizations such as the UN and government and military personnel (including foreigners) are today some of the major buyers of ivory. In many cases the actual purchase of raw and worked ivory is legal, but these people take the ivory items out of the countries illicitly. North Korean diplomats are some of the most infamous in this trade. The main customers for ivory in Djibouti are French army personnel and their families. Conservationists and wildlife trade specialists have greatly under-rated the importance of this problem.

There is often a direct link between the number of foreign tourists in a city and the number of ivory objects being sold. For example, Egypt, which attracts over three million foreign tourists a year, has shops in Cairo, Luxor and Aswan displaying more than 20,000 ivory pieces for retail sale. In Djibouti-ville where the lowest number of ivory items was seen in the survey, there are the fewest tourists. From mid-1998 to mid-1999, during the Ethiopian/Eritrean war, the number of tourists to Ethiopia declined by at least 80% and by June 1999 the souvenir shops in the capital had almost no customers.

In Africa, the main retail buyers of worked ivory, excluding the various officials and military personnel mentioned above, are tourists, especially from France, Italy and Spain. There is also increased buying of ivory items by Chinese and Korean workers in several countries such as Sudan and CAR. Less significant buyers are Japanese, Portuguese and, for Egypt, Latin Americans. The most popular pieces now selling are small items, especially jewellery, as they are easy to hide in one's luggage. The large carved tusks and other big pieces sell extremely slowly in most places.

The wholesale market for ivory items and for raw tusks in Africa and the trade routes

In addition to retail sales, there is also a wholesale trade in ivory items for export. The buyers are North and South Koreans and Chinese who transport these goods to sell in eastern Asia. African businessmen, mainly Senegalese and Nigerians, also buy substantial quantities of worked ivory wholesale in Cameroon and DRC to sell in other countries in the region.

In certain parts of Africa there are large quantities of raw tusks being smuggled across international boundaries into cities for making ivory curios. For instance, there is recent evidence of large movements of tusks from Garamba National Park in northern DRC to neighbouring Sudan and beyond. Many elephants were killed in the middle and late 1990s in Garamba Park reducing the elephant population from an estimated 11,175 in 1995 to 5,487 in 1998 (Hillman-Smith, 1998). The poachers are mostly Sudanese (Martin and Hillman Smith, 1999) who organize the transport of the tusks northwards to craftsmen in Omdurman and Cairo. Sudan joined CITES in 1982 and Egypt in 1978 so all their ivory imports and exports are illegal. The Egyptian ivory markets are also supplied from poached elephants in CAR, Cameroon and West Africa.

There are considerable illegal movements of tusks also in Central and West Africa to various markets in the region. The main raw ivory sources for the West African markets are CAR, DRC, Cameroon and Gabon, probably in that order. Ivory from eastern DRC and CAR goes to north-east Africa (Sudan and Egypt as mentioned above), north-westwards to Nigeria and to other West African destinations, mainly Abidjan and Dakar. Maiduguri in northern Nigeria is a main transit centre for the western trade. Ivory from Gabon leaves by three main routes: from Libreville by ship or by air, or by land across the northern border into Cameroon. The raw ivory leaving by sea and air is destined for Europe and Asia. The ivory from poached elephants in northern Gabon is transported by road to Yaounde where it is sold and/or transported to Douala or onto Nigeria. Some tusks from Cameroon enter Nigeria via Calabar by boat on their way to Onitsha where some are worked and some are sent on to Lagos to be worked. Ivory from Cameroon and elsewhere that enters northern Nigeria via Maiduguri goes to Kano, home of most of the Hausa ivory traders. Some is crafted and sold here, some goes to Lagos, and some is transported to Abidjan or Dakar by road.

Prices for both raw and worked ivory are higher in countries where demand exceeds supply than in countries where the reverse is the case. In West and Central Africa, prices are generally lowest in eastern CAR and DRC, and prices rise as the ivory moves from there, reaching their peak in Dakar. Kinshasa is a temporary anomaly with moderately high prices due to the ivory shortage caused by the civil war in DRC. In north-east Africa, prices are lower in Ethiopia because it has an elephant population, and more ivory items are made there than in Djibouti, while prices in Sudan for raw ivory are less than half those in Egypt (as again the latter has no elephants). The worked ivory prices are also less expensive in Khartoum than in Cairo. In southern Africa, wholesale (and retail) raw and worked ivory are cheap in Zimbabwe and South Africa, mainly because there is an ample supply of raw and worked ivory. In Mozambique, tusks are inexpensive because there is a sufficient supply of tusks from poached elephants within the country, and additional tusks come illegally from government stores (Milliken, pers. comm., 2000).

Exports of raw and worked ivory from the African continent

In addition to the movement of raw ivory within Africa, there are also exports of raw ivory leaving the continent. Traders in Mozambique, Gabon, Nigeria, DRC, Sudan, and especially Cameroon, export illicitly tusks to Europe (usually in transit to Asia), China, South Korea and Taiwan, according to certain businessmen dealing in ivory. As for worked ivory, North Korean diplomats are notorious for smuggling these items as well as tusks. They are even supported by their government to do so, probably a unique situation. North Korean officials are known also to smuggle drugs, distribute fake US hundred dollar bills and peddle fake antiques (Kaplan et al., 1999).

The bush meat trade

The investigators also picked up strong evidence that elephants in some populations are being killed primarily for their meat. Of course, the tusks are removed for eventual sale, but the bush meat trade largely drives some hunters. The elephant meat is dried, smoked, salted or kept fresh and then transported to village, town and city markets within the country and to neighbouring ones. The killing of elephants for the bush meat trade is especially noticeable in DRC, CAR, Gabon and Cameroon. For example, Arabic-speaking gangs of poachers armed with automatic rifles and mobile radios have moved into the Digba-Bila area of northern DRC to poach elephants for their meat and to a lesser extent for their tusks. Both the meat and ivory are transported by horses and camels across the border to CAR and farther northwards to Bangui, or are taken from DRC to

western Sudan, where most of the meat is sold, and farther north to sell the ivory in Omdurman (Ammann, pers. comm., 1999, and pers. comm. from a former American missionary who lived in the Digba-Bila area for many years).

Fake ivory sales and the use of alternative materials to ivory

The investigator has discovered some ivory frauds perpetuated against tourists. In Nigeria and Cameroon, there are dishonest businessmen who make new ivory items appear old in order to sell as antiques for higher prices. In Sudan and Egypt, a lot of camel bone carvings are mixed in with ivory ones on exhibition, and some tourists are tricked as they cannot distinguish between the two. A few artisans who pretend their items are made from elephant ivory use hippo teeth. In some countries such as CAR hippo teeth are easy to obtain and cheaper than elephant ivory.

In West and Central Africa, hardwoods, cow bone, wild pig tusks and hippo tusks are used extensively as carving materials. Craftsmen of these materials are especially found in Dakar, Abidjan and Bangui due to a shortage of elephant tusks, and in Libreville where law enforcement prevents much elephant ivory being displayed. Ivory craftsmen in Lagos and the cities surveyed in Cameroon use very few alternative materials, usually only hardwoods, suggesting that ivory is more plentiful there. In Egypt and Sudan, ivory craftsmen work more in camel bone and wood, and in Ethiopia, Zimbabwe and South Africa, most former ivory craftsmen now work in wood, due to the collapse of the ivory market. In Mozambique, the craftsmen who prefer crafting elephant ivory work usually in wood as these items sell better to tourists since they are cheaper.

Law enforcement efforts in Africa

One of the main findings of this survey of the ivory markets in Africa is that few African governments effectively control the international trade in ivory. Since all the countries visited for this project are members of CITES, all commercial imports and exports are illegal (except for exports of personal items from Zimbabwe with special CITES permits). As already documented in this report, there is a large movement of illicit ivory, especially from Central Africa, to neighbouring countries and off the continent. In West Africa, which does not have many elephants — less than 15,000 in 1995 (Said et al., 1995) - raw ivory is smuggled from Central Africa into the region for the craftsmen or for re-export abroad. In West and Central Africa, Customs and other officials rarely intercept illegal consignments of raw ivory, because they do not have adequate manpower, resources or commitment. In some countries, Customs officials are corrupt and take bribes. In Sudan, Egypt, Djibouti and Ethiopia, virtually no ivory smugglers are known to have been apprehended in the recent past. On the other hand the law enforcement officers in Zimbabwe and especially in South Africa are efficient and do convict illegal ivory traders.

The government regulations on most ivory carving industries in Africa are inadequate and very rarely implemented. The internal sales of worked ivory are legal in the 13 African countries surveyed for this report except for Gabon. Internal sales are also legal in Sudan, but not in Egypt. In Gabon, alone, the investigator in Libreville saw several hundred ivory items. In Egypt, ivory is widely displayed in Cairo, Luxor and Aswan, and the authorities almost never make inspections.

In contrast, regulations in Zimbabwe for the ivory craftsmen and vendors are the most comprehensive in Africa and are enforced by the authorities. Details on these regulations have been published by Martin (1984) and Dublin et al. (1995); suffice to say here that amongst them is the requirement for businessmen owning workshops and retail outlets to obtain at least three government licences annually. These are an ivory manufacturer's licence, ivory dealer's licence and trophy dealer's licence. They also need to fill out monthly forms stating the quantity and weight of the ivory items in hand at the beginning of the month, the number of items produced, quantity of new items bought, quantity sold, etc. The important point is that not only do the Zimbabwean government authorities have thorough regulations on the internal ivory trade, but the government actually rigorously enforces them.

Perceptions of the future of the ivory trade by the vendors and craftsmen in Africa

Selected vendors and ivory craftsmen in West and Central Africa were asked if they had heard anything about the auctions of the raw ivory stocks in the three southern African countries (that

took place in April 1999). All who were asked knew something about them, but few understood why or how they were carried out. Most thought that the auctions signalled the imminent lifting of the CITES ban on international trade in ivory, and they were looking forward to the revival of the market that would ensue. No one asked seemed to think that there was any chance of overexploiting elephant populations. The common perception was that there were sufficient elephants to supply ivory to an increased market. Several traders knew of the claims made by Zimbabwe and other countries that they had too many elephants and cited this as confirmation that lifting the ban would not threaten the survival of the elephant. In DRC, CAR, Gabon and Cameroon it was common to hear from the ivory vendors and traders that there were too many elephants, as stories about elephants raiding farms, destroying crops and harming people were widespread.

In Djibouti, souvenir shop owners and vendors never mentioned the April 1999 official sales of raw ivory from southern Africa, but were concerned about the decline in the number of French buyers of ivory commodities. In Addis Ababa almost all the vendors were extremely pessimistic about the future of the ivory industry as there has been a collapse in the number of tourists from mid-1998. They never mentioned the one-off sales, probably as at the time in June 1999 they knew very little about them.

In Harare there was a mixed response to future prospects. Some of the main dealers have experienced small increases in ivory sales in 1999 as compared to 1998 and were thus slightly optimistic, while others felt that there was no future unless the international trade in ivory curios is once again legal into USA, Japan and elsewhere.

The vendors in South Africa are some of the most despondent on the continent. Unless the Parties to CITES change their minds and allow international trade in ivory souvenirs (which the vendors think is unlikely in the next few years), the vendors believe that there is no future. The one-off sales of government owned stocks of raw ivory to Japan have not helped their sales, they claim, as buyers apparently realize that they cannot legally export their ivory items from South Africa.

The investigators believe that publicizing and holding another auction in Africa would strengthen the misconception (due to probable faulty reporting by some NGOs and the press) that the international trade in ivory is going to be made legal; this would stimulate the search for additional ivory stocks in anticipation of a more robust market. It is the common perception amongst ivory traders and craftsmen that many more people would buy more and larger pieces of worked ivory if they could import them legally into their home countries. In many parts of southern Africa this increased trade would arguably be sustainable, but it almost certainly would not be in Central or West Africa where wildlife and protected areas management are weak or non-existent. Eastern Africa is a particular situation, where elephants are not threatened with extinction, but their value to tourism probably exceeds the value of their ivory.

References

- Dublin, H.T. and Jachmann, H. (1992). *The Impact of the Ivory Ban on Illegal Hunting of Elephants in Six Range States in Africa*. WWF, Gland, Switzerland.
- Dublin, H.T., Milliken, T. and Barnes, R.F.W. (1995). *Four Years After the CITES Ban. Illegal Killings of Elephants, Ivory Trade and Stockpiles*. IUCN, Gland, Switzerland.
- Hillman-Smith, A.K.K. (1998). The Current Status of the Northern White Rhino in Garamba, *Pachyderm*, 25, 104-105.
- Kaplan, David with Butler, Steven and Madden, Mark (1999). North Korea's Global Crime Spree, *Reader's Digest*, southern Africa edition, 48-51 (August).
- Martin, E.B. (1984). Zimbabwe's ivory carving industry, *TRAFFIC Bulletin*, VI (2), 33-38.
- Martin, F. and Hillman Smith, K. (1999). Entrepôts for Rhino Horn in Khartoum and Cairo Threaten Garamba's White Rhino Population, *Pachyderm*, 27, 76-85.
- Said, M.Y. et al. (1995). *African Elephant Database 1995*. IUCN, Gland, Switzerland.

Conclusion

This report on the main cities in Africa where the ivory trade is notable has shown that there are over 100,000 ivory items available for retail sale in these markets. On the whole, however, retail sales are slow. There was a significant drop in demand for ivory souvenirs throughout most of Africa in the early 1990s; this has remained the case in most of the cities surveyed. There has also been a major reduction in the number of ivory craftsmen. The price of raw ivory has fallen in most countries since 1989. There appears to be, however, a moderate movement of tusks especially from Central Africa to the west of the continent. Hundreds of tusks have also been smuggled annually off the continent in the 1990s to go to end markets in eastern Asia.

Most domestic trade in worked ivory items is legal. There is little government control on the illicit movement of tusks and worked ivory across borders except for certain southern African countries. There have been many incidents of corruption, including Customs officials being bribed. Diplomats and personnel from the military and from international organizations are much more heavily involved in illegally exporting raw and worked ivory from Africa, using their diplomatic immunity, than previously thought. North Korean diplomats have been large buyers of ivory in Africa over the last ten years. South Korean businessmen are keen buyers of worked ivory. The other main buyers of ivory items today are tourists from France, Italy and Spain.

In Central and West Africa the retail ivory trade crashed in 1990 and has remained low except for Lagos and Abidjan. In Lagos sales have increased in the 1990s, perhaps back to the late 1980s level, while Abidjan's sales have risen since the mid-1990s to some extent. In 1999 there has been a slight increase in the sales of ivory carvings compared with the year before in Cairo, and at the largest shops in Harare. In Cairo this has been due to an increase in tourists. In Harare some tourists have believed incorrectly, due to mis-information, that they can import ivory items from Zimbabwe into their home countries.

Vendors and craftsmen in West and Central Africa have heard that there have been ivory sales in southern Africa and they think this is very good news as it may be the beginning of the ban being lifted for the whole of Africa. In Egypt there are feelings of optimism, as in Harare, among certain traders. But in Ethiopia, South Africa and Zimbabwe's Victoria Falls, traders are pessimistic about the future of the ivory industry.

This report has shown that there has generally been only a little increase in the demand for ivory items in the 1990s and that sales have remained poor on most of the continent. If the African ivory industry were to grow significantly once more in the coming years, this would have a negative effect on some elephant populations as the main source of raw ivory is from poached elephants.

acknowledgements

The authors would like to thank the following people for providing information and other assistance for this report: Karl Ammann, A.L. Archer, Michael Asher, Jason Cambitzis, Iain Douglas-Hamilton, Steve Gartlan, R. Gruer, Don Heath, Jessica Higginbottom, Kes Hillman Smith, Paula Kahumbu, Njoki Kibanga, Olivier Langrand, P. Lategan, Wayne Long, Chris Magin, Cbrysee Martin, Patrick Mavros, Oliver Oyrer, Richard and Rita Pankhurst, I.S.C. Parker, Simon Pillinger, Fraser Smith, and Pauwel De Wachter.

Five referees — Iain Douglas-Hamilton, Holly Dublin, Nina Marshall, Tom Milliken and Chris Thouless — very kindly put a considerable amount of time into checking the report for accuracy and suggesting ways to improve it. The authors are most grateful to them all.

A final person to thank is Lucy Vigne who helped to improve the manuscript and prepare it for publication. We are most grateful to her for all the time she put into this report and for the useful suggestions she made.