
Status and trends of the ivory trade in Africa, 1989–1999

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Abstract

Major surveys of 22 cities in 15 African countries found over 100,000 elephant ivory items for retail sale in the late 1990s. In all countries except Egypt, Gabon and Sudan, this domestic trade is mostly legal. The cities with the largest number of pieces were Abidjan (20,114), Harare (19,958) and Cairo (11,627). The main buyers of African ivory pieces are foreign tourists (mostly from France, Italy and Spain), Chinese and Korean workers and businessmen, French military and their families, United Nations officials, and national diplomats. Except for Zimbabwe, the export of all those ivory commodities is illegal.

There is a significant illicit movement of raw ivory (tusks) within Africa, especially from central to West Africa for the local carving industries. Tusks are the cheapest in the Democratic Republic of Congo, the Central African Republic, Cameroon and Mozambique, where there are still relatively large populations of elephants, and there is little law enforcement. Prices vary for tusks from USD 14/kg in Maputo in Mozambique to over USD 100 in Dakar in Senegal for a tusk weighing 1–5 kg. There is also an illegal trade in tusks off the continent, mostly to China, but also to South Korea and other countries in eastern Asia.

Compared with 1988 the prices for most retail ivory items have decreased in many parts of Africa as a result of the decline in demand (that is, the absence of buyers) and the devaluation of local currencies. There has also been a sharp decline in the price of the tusks in most places. Since the 1990 CITES ban on the international trade in African elephant ivory, the only surveyed African city having an increase in retail sales is Lagos in Nigeria. Since the mid-1990s, there has been an expansion in retail sales in Abidjan in Cote d'Ivoire.

Resume

Des recherches importantes réalisées dans 22 villes de 15 pays africains ont permis de trouver plus de 100.000 objets en ivoire d'éléphant à vendre à la fin des années 1990. Dans tous les pays, sauf l'Égypte, le Gabon et le Soudan, ce commerce intérieur est le plus souvent légal. Les villes où l'on a trouvé le plus grand nombre d'objets étaient Abidjan (20.114), Harare (19.958) et Le Caire (11.627). Les acheteurs principaux d'objets africains en ivoire sont des touristes étrangers (surtout de France, d'Italie et d'Espagne), des travailleurs et des hommes d'affaires chinois et coréens, les militaires français et leur famille, les employés des Nations unies et les diplomates locaux. L'exportation des articles en ivoire est interdite dans tous les pays sauf au Zimbabwe.

Il existe un trafic illégal significatif d'ivoire brut (défenses) en Afrique, spécialement d'Afrique centrale et occidentale vers les industries de sculpture locales. Les défenses les moins chères se trouvent en République Démocratique du Congo, en République centrafricaine, au Cameroun et au Mozambique, où les populations d'éléphants sont encore relativement importantes et où les lois sont peu appliquées. Le prix des défenses varie de USD 14 le kilo à Maputo, au Mozambique, à plus de USD 100 à Dakar, au Sénégal, pour une défense qui pèse entre 1 et 5 kilos. Il existe aussi un trafic illégal en dehors du continent, surtout vers la Chine, mais aussi vers la Corée du Sud et d'autres pays d'Extrême-Orient.

Lorsqu'on les compare avec ceux de 1988, les prix de la plupart des objets en ivoire ont baissé dans de nombreuses régions d'Afrique, suite à la diminution de la demande (c.-à-d., l'absence d'acheteurs) et la dévaluation des monnaies locales. Il y a aussi souvent une forte diminution du prix des défenses. Depuis le ban imposé par la CITES en 1990 sur le commerce international de l'ivoire d'éléphant africain, la seule ville africaine visitée où l'on a constaté une augmentation des ventes au détail est Lagos, au Nigeria. Depuis le milieu des années '90, il y a une augmentation des ventes au détail à Abidjan, en Côte d'Ivoire.

Introduction

The surveys on the domestic trade in ivory, carried out in 22 cities within 15 countries of Africa, were to establish baseline data on various indicators of the ivory trade from which to assess the current status and future trends. Something can also be said about the trend in demand for worked and raw ivory in Africa from comparing the results of this study with data contained in previous reports, beginning in 1989, the year CITES agreed to establish the ban on the international trade in African elephant ivory. It is widely agreed that the CITES ban, which started in 1990, and the associated publicity campaign greatly reduced the volume of trade and demand for ivory. This achieved its intended result of decreasing the poaching of elephants (Dublin and Jachmann 1992, Dublin et al. 1995), at least until recently.

This study was made more urgent by the 1997 CITES decision to transfer some southern African elephant populations to Appendix II and permit a single experimental quota and auction of government ivory stocks for export to Japan (Gray 1997). These auctions were held in April 1999 in Zimbabwe, Botswana and Namibia and 49,735 kg of ivory were sold to Japanese dealers at an average price of USD 103/kg (JWCS 2000). Some have argued, based on information from vendors, that the Appendix transfer stimulated poaching in anticipation of the easing of the ban (JWCS 2000, EIA 2000, AWI 2000, Kantai 2000). Elephant poaching was possibly also stimulated by the proposals made to CITES 2000 in Nairobi by South Africa, Zimbabwe, Botswana and Namibia to sell limited quantities of ivory again to Japan, according to people in the ivory carving industry interviewed in southern Africa.

There are few hard data with which to assess the effects of the 1999 auctions and any future ivory sales. The results of this study show that there have been signs of a recent increase in demand in some parts of Africa, but we cannot conclude that the auctions stimulated this demand because information from the 1996–1998 period is not complete enough. This study can be used to assess changes in future in the ivory trade in Africa in response to any renewed legal international ivory trade, as now the baseline of data is much more solid. This study should be repeated before the CITES Conference of the Parties in 2005 to provide necessary information to the delegates on the status and trends of the trade at that time to assist

their making a decision about whether to permit renewed ivory sales, if requested by a party state.

Save the Elephants, a conservation organization based in the United Kingdom and Kenya, sponsored the 1999 survey, but the authors arrived at the results independently, and we take full responsibility for the findings and conclusions of the study. Further details can be found in Martin and Stiles (2000), although we have revised certain interpretations and conclusions in this article.

Methods

The 15 countries selected for the surveys are the most active in Africa for domestic ivory sales. The Republic of the Congo and Angola reportedly have moderate domestic markets, but they could not be visited because of insecurity. Selected data are used from Madzou and Moukassa (1996) for the Republic of the Congo, however. Thirteen of the countries were visited between May and November 1999, with results of the work given in this paper; Egypt and Sudan were surveyed in 1997 and 1998 by one of us (Martin 1998, 2000) and are referred to in the tables and the conclusion. Martin covered north-eastern and southern Africa while Stiles visited central and West Africa. We visited the capitals of each country, and in some cases other centres of the ivory trade, but time and money constrained a comprehensive survey as the final report needed to be ready before the 2000 Conference of the Parties of CITES.

We each visited as many retail outlets and ivory-carving workshops in each city as we could find in the time available. We then counted every piece seen, obtained representative retail asking prices and the price of raw ivory the workshops paid to middlemen by tusk weight categories, asked about ivory turnover measured by value and weight in both retail outlets and workshops, counted the number of craftsmen, tried to determine their incomes, and asked about past conditions of all of these indicators back to the 1989 pre-CITES ban period. We have also used the results of previous studies in this paper and in tables 1–4. In several places, we engaged in bargaining to assess what the actual going prices for selected worked types would be.

Obtaining good data presented many difficulties. Vendors and craftsmen were often wary and suspicious, particularly in countries in which illegal ivory was being used, but they gave consistent data. The political and security situation in some countries also made work

demanding. Occasionally we did not have time to count every piece and had to make estimates. Nevertheless, we collected sufficient information to present a fairly clear picture of the current status of the ivory trade.

Stiles estimated the weights of the pieces he saw. All ivory items were categorized by type and size, for example, bust 10–20 cm, 20–30 cm, and so on; animal 10–20 cm, 20–30 cm, and so on. The method was to pick up a representative piece and assess its weight, then multiply by the number in each category and add up the total weight for each outlet. Estimated weights were checked with craftsmen as a guide. Since the Martin and Stiles (2000) report has been published, the Madzou and Moukassa (1996) report has been obtained. This report published detailed descriptions and photographs of ivory types in Brazzaville, including the weights obtained by actual scale weighing, which confirmed that the estimates Stiles made were within 10% of the actual weights.

Results

Central Africa's legal position for the trade in ivory

CAMEROON

Selling worked ivory under permit is legal in Cameroon 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 everywhere in the country except for the far north, but elephants with tusks smaller than 10.1 kg are protected.

CENTRAL AFRICAN REPUBLIC

Internal ivory sales are legal in Central African Republic (CAR) if the ivory is certified by the government as either found or confiscated and then sold under licence to users. In practice, however, vendors said that the government sells no ivory under licence. All raw ivory obtained and used by carvers in Bangui is therefore illegal, obtained from poached elephants or from government personnel through corruption. An audit

of government-declared ivory stocks in Africa that TRAFFIC reported to CITES in February 1998 revealed that CAR declared 886.2 kg but TRAFFIC found only 121.8 kg at around the same time. CAR joined CITES in 1980. Sport hunting is openly carried out in CAR, in spite of a hunting ban made in 1985 (ELC 1987).

CHAD

Chad joined CITES in 1989. The sale of carved ivory within the country is legal. Hunting was made illegal in the country in 1999 by presidential decree, except in authorized sites for private investors.

REPUBLIC OF THE CONGO

Elephant hunting in the Republic of the Congo was banned in 1991 and the possession of tusks or other elephant products must be declared to the government within three months. It is legal to sell worked ivory, but the ivory must be marked by the Ministry of Water and Forests and vendors must keep records of purchases and sales. The Republic of the Congo joined CITES in 1983. (This information is from Madzou and Moukassa 1996.)

DEMOCRATIC REPUBLIC OF CONGO

The Democratic Republic of Congo (DRC, formerly Zaire) joined CITES in 1976. Commercial ivory exports have been banned since 1980 (Caldwell and Barzdo 1985) and elephant trophy hunting was banned in 1984 (Caldwell 1987). Selling worked ivory is ap-



Daniel Stiles

A potential customer shops for ivory in the Lagos Ilesan art market.

parently legal as it is sold openly in various places in the capital, and one section of the central craft market is reserved for ivory. Kinshasa was the only place surveyed, as the civil war was going on when Stiles visited the country in June 1999.

GABON

It is illegal to kill elephants, transport raw ivory or sell worked ivory in Gabon (ELC 1987), thus there is little openly displayed. Gabon joined CITES in 1989.

Retail sales of worked ivory in central Africa

In the five countries of central Africa that Stiles surveyed, he visited 129 retail shops and 23 workshops. More than 14,000 worked ivory pieces weighing a

minimum total of 1,430 kg (table 1) were seen. The amount of worked ivory displayed has decreased since 1989 according to the data in the places where they are available (Allaway 1989a,b,c), from 2230 kg found in Gabon's capital, Libreville, and in Douala and Yaounde in Cameroon to 698 in 1999. The number of outlets where ivory is sold has also been reduced, and there are fewer workshops in 1999 than there were in 1989 (table 2). Nevertheless, Douala was still the third most active retail ivory market seen in central and West Africa in 1999, after Abidjan and Lagos.

The only place where the sale of worked ivory could be calculated was the Bikeko market in Kinshasa in DRC. Retail sales have plummeted since the CITES ban in 1990, but Stiles calculated a figure of about 1600 kg a month of ivory worked in 1999,

Table 1. Indicators of the ivory trade and prices for raw ivory, mostly as of 1999

City	Retail outlets	Workshops visited	Craftsmen	Raw prices (USD)			Min. no. items	Weight (kg)
				< 1 kg	1–5 kg	> 5 kg		
Dakar	30	2	4	–	100–120?	–	4338	407
Abidjan	52	14 + 1?*	97 + 10?*	4	41–58	65–80	20114	2748
Lagos	40	5 + 1?*	33 + 10?*	< 50	46–50	50	5966	1742
N'Djamena	24	0	0	–	–	–	1000+	33+
Douala	28	7 + 6?*	32 + 12?*	< 27	27–30	30–50	4891	510
Yaounde	15	1?*	6?*	< 30	38	38–50	1124	144
Libreville	8	0	0	< 30	30	42	462	44
Bangui	26	3	12 + 10?*	< 15	15–20	20–25	2219	211
Kinshasa	28	13	116	30	30–50	> 50	4324	485
Brazzaville 1995	–	–	–	–	4–9	8–20	–	–
Djibouti-ville	18	0	0	–	68	–	453	–
Addis Ababa	54	4 + 2?*	10–20	28	37	53	9996	–
Cairo	–	–	–	–	80	137	–	–
Cairo 1998	88	6 + 4?*	100	34	62	98	11627	–
Luxor 1998	33	0 + 1*	< 12	–	–	–	6445	–
Aswan 1998	21	0	0	–	–	–	3388	–
Omdurman & Khartoum 1997	34	3	< 20	15	44	–	1500–3000	–
Harare	23	1 + 6*	30	8	12	17	19958	–
Victoria Falls	10	0	0	–	–	–	517	–
Johannesburg	20	0	0	–	–	–	1361	–
Cape Town	33	0	0	–	–	–	2036	–
Durban	20	0 + 1*	1–3	–	–	–	3989	–
Maputo	52	8 + ? *	100	–	14	28	3619	–
Totals	657	67 + 22?*	573–585 + 42?*				109327–110827	

* Workshops and craftsmen told about but not visited.
– no data

Table 2. Comparisons of ivory trade indicators and raw ivory prices for 1983 or 1989 and 1999

CITY	Price for pieces > 1 kg (USD/kg)		Outlets (no.)*		Workshops (no.)		Quantity for sale (kg)	
	1989	1999	1989	1999	1989	1999	1989	1999
Abidjan	–	40–80	56–61	37	12	15	4880	2748
Lagos	14–29	46–50	34	35	–	6	1081.5	1742
Douala	65–81	27–50	~ 50	21	> 3	> 7	880	510
Yaounde	–	38–50	15	14	–	1?	610	144
Libreville	45–65	30–42	> 48	~ 10	> 9	0?	740	44
Kinshasa	40–50	30–50	–	30	21	13	–	485
Harare	105	16	–	–	–	7	–	–
Johannesburg	–	–	–	–	2 ^a	0	–	–
Cape Town	–	–	–	–	2 ^a	0	–	–

* non-workshop outlets

– no data

^a 1983 data

or 19.2 tonnes a year, which should be considered a rough estimate. Of this amount, approximately 1200 kg of worked ivory per month is exported, taking into account 20% carving waste (Martin and Stiles 2000). Stiles estimated the 1996–1998 amount to be 1300 kg being sold at the Bikeko market, leaving a balance of about 1600 to 1900 kg a month for export before the rebellion. De Meulenaer and Meredith (1989) estimated that Kinshasa factories processed 5 to 10 tonnes of raw ivory in 1989; thus it appears that ivory consumption has at least doubled since then, although it is still considerably below the estimated 60 to 70 tonnes that were consumed in 1988.

Although the data from 1989 are not detailed enough (Allaway 1989a,b,c), it appears that retail prices are slightly less today than in 1989 in absolute

terms (table 3). If inflation is taken into account, retail prices are considerably lower in 1999.

The buyers of worked ivory in central Africa vary somewhat from country to country, but the main ones appear to be French, Italian and Spanish among the Europeans, and Chinese, Korean and Japanese from Asia. They are diplomats, UN personnel, businessmen, missionaries and military (French). Tourists buy a small amount. Italians and Spanish ship worked ivory to their countries by air, and African traders take ivory to these countries to sell in street markets. Blank name seals (*hankos*) are popular with many eastern Asians.

The data presented here for the Republic of the Congo are from 1994–1995 (Madzou and Moukassa 1996). Worked ivory is sold in Brazzaville mainly at

Table 3. Average retail price comparisons for selected central and West African cities, 1989–1999

Item	Lagos (USD)		Libreville (USD)		Douala & Yaounde (USD)	
	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 < 1 cm	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
Human figure 10–20 cm	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 50 cm	–	50–300	565	–	194	148–557

USD 1 = 310 CFA and 10.5 Nigerian naira in 1989

– no data

Table 4. Price comparison of selected worked ivory pieces in north-eastern and southern Africa, 1983 or 1993 and 1999

Addis Ababa (USD)			Harare (USD)			Johannesburg (USD)		
Item	1993	1999	Item	1983	1999	Item	1983	1999
Comb 11 cm	30	19	Animal 2.5 cm	7	2.43	Necklace, beaded	60	30
Pipe 11–20 cm	71	25	Animal 4 cm	18	3	Lighter	45	40
Female bust 12 cm	121	81	Key chain	4–8	1.76	Napkin rings, 6	45	40
Bangle 7 mm	8	4	Bangle 7 mm	10	–	Bangle 1.25 cm	45	40
			Brooch, small	8	3			

– no data

the Plateau market, at the Sofitel and Meridien hotels, at the Score supermarket, in front of the main post office, and at the Maya-Maya airport. The Plateau market has nine tables that display ivory, but no information was given by Madzou and Moukassa on the other outlets. Ivory weights were given for only four tables at the Plateau market. They vary from a minimum of 3 kg to a maximum of 70 kg at each table. The quantities vary by season in response to demand. The average price of all categories for worked ivory was USD 100/kg (350 CFA francs = USD 1). The four sample ivory tables earned a combined annual income of USD 83,759, with a range of USD 40,706 down to USD 1065. The four tables sold a total of 859.3 kg of worked ivory over the course of a year, with a range of 476.6 to 8.3 kg.

The main buyers were Congolese (24%), French (24%), Senegalese (13.7%), Chinese (7.9%), Italians (5.8%) and Russians (5.2%), but in quantity purchased the order was Senegalese merchants first, then French

military and diplomats, followed by Chinese, Italians and Russians about equal.

Raw ivory prices in central Africa

Raw ivory prices had been rising over the past two years (1997–1999) and by mid-1999 seemed to be in flux. The reason given was that the war in DRC was cutting off ivory supplies. Bangui in CAR was definitely the cheapest place, where < 1 kg tusks cost less than USD 15/kg depending on size and quality, and mid-range tusks (1–5 kg) went for USD 15–20/kg. Larger tusks, rare these days in CAR, still cost only USD 20–25/kg because of the low demand. Similar tusks in Cameroon and elsewhere ranged at USD 25–50/kg (table 1). Prices were considerably higher in 1989 before the CITES ban everywhere except Lagos (table 2), where prices have risen to USD 50/kg for large tusks. An informant from Bukavu in eastern DRC, encountered in Kenya in October 1999, said that raw ivory was plentiful in eastern DRC. The price was USD 20/kg, and it could be smuggled into Kenya hidden in trucks with imports of crafts. Raw ivory from eastern DRC is currently being smuggled into Kampala in Uganda and exported to Hong Kong by a local craft dealer (Thomas Price, wildlife trader, pers. comm., October 1999).

The prices in the Republic of the Congo in 1995 seem very low (Madzou and Moukassa 1996), but they support informant statements in this study about recent price rises. Tusks less than 5 kg sold at USD 4.29–8.57/kg, de-



Daniel Stiles

A typical ivory stall in the Ilasan art market outside Lagos, Nigeria.



Abidjan, Ivory Coast, not only displayed the most worked ivory of any city visited in the entire study, but the carving styles were also the most varied.

pending on quality, and 5–10-kg tusks cost from USD 8 to more than USD 20/kg (350 CFA = USD 1). Meredith (1989) found that raw ivory in Brazzaville cost USD 16.66–26.66/kg for tusks less than 5 kg and USD 26.66–30/kg for 5–10 kg tusks in 1989, below other central African prices at that time (table 2).

Ivory workshops in central Africa

Stiles visited 23 workshops in central Africa, although there were probably others that could not be found because informants either would not reveal their location, or if they did, would not agree to take the investigator to them. None of the workshops had large ivory stockpiles, and all of the craftsmen complained of a severe ivory shortage caused by the DRC war. Wood, bone, or hippo or pig tusks are replacing ivory in Bangui, Kinshasa and Libreville, although Cameroon still has adequate ivory supplies. Some factories in Douala also manufacture fake ivory antiques, which is a growing business.

The workshops sell much of their output to vendors at the local craft centres and hotels, but resident Europeans and Asians also come directly to the workshops to buy it. Senegalese and Nigerian traders used to come to Kinshasa and Bangui to buy both raw and worked ivory to take out with them, but few do today because of limited supplies. Douala workshops still get quite a few foreign traders coming to buy for export, although Yaounde seems much less involved.

West Africa's legal position for the trade in ivory

CÔTE D'IVOIRE

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

NIGERIA

It appears that the internal trade in both raw and worked ivory is permitted as long as documentation is obtained from the relevant authorities and that the ivory originates from 'mature' elephants, although no definition is provided as to what constitutes a mature elephant (ELC 1987, Allaway 1989c, Dublin et al. 1995). Mature elephants can be hunted under licence in northern Nigeria (Dublin et al., 1995). Nigeria joined CITES in 1975.

SENEGAL

Worked ivory is legally sold in Senegal, but elephant hunting is illegal (ELC, 1987). Senegal joined CITES in 1977.

Retail sales of worked ivory in West Africa

The survey visited 122 outlets and 21 workshops in West Africa. The large number of these for the three countries of Côte d'Ivoire, Senegal and Nigeria is almost equal to the total seen for the five countries visited in 1999 in central Africa, demonstrating that the ivory market is more active in this region. The quantity of pieces seen, some 30,418 weighing at least 4900 kg, was also much greater than that found in central Africa (table 1). Abidjan in Côte d'Ivoire dis-

played more ivory than any other city in the study. The retail prices of worked ivory also tended to be higher than prices in central Africa, particularly those in Dakar in Senegal, which were higher than anywhere except Egypt.

No reliable ivory turnover rates could be gathered from informants, but observation suggested that Lagos and Abidjan had brisker sales and more buyers than elsewhere. Both these cities demonstrated clear evidence of a rise in sales for worked ivory since 1990 and 1994 respectively, after the market crash that the CITES ban caused. The total weight of almost 1.8 tonnes of worked ivory seen for sale in Lagos in 40 outlets in 1999 is a marked increase over 1989 when Allaway (1989c) found 34 outlets displaying 1,081.5 kg, and in 1994 when Dublin et al. (1995) found only 500–700 kg of worked ivory in that city. In Abidjan the pattern is of a drop in displayed ivory from 4880 kg in 1989 to about 1750 kg in 1994, followed by a resurgence to about 2750 kg in 1999. We were not able to evaluate the reliability or comparability of the other reports, however, as they did not describe the method used for either their surveys or estimating ivory weights. The worked ivory domestic market

seemed much less active in Dakar in 1999 than in the other two West African cities of Abidjan and Lagos, which were more comparable to Kinshasa.

Retail prices were highest in Dakar. There is no clear evidence of retail price changes between 1989 and 1999, as the data are not detailed enough from 1989 (table 3).

The main buyers in Lagos were Chinese workers renovating the rail system, American oil workers and businessmen from the Middle East. In Abidjan and Dakar vendors would not answer questions about who the main buyers were.

Raw ivory prices in West Africa

Prices increased with distance from the main raw ivory sources in central Africa. Tusks in Lagos at USD 45–50/kg were somewhat more expensive than in Douala, particularly for the smaller sizes, with higher prices still in Abidjan (USD 41–80/kg). Vendors in Dakar would not answer questions concerning raw ivory prices, but judging from prices for polished whole tusks, the raw ivory price would be USD 100–120/kg for 1–5 kg sizes (table 1). Ivory carvers all said that prices had been rising since the conflict started in DRC.

Lagos is the only city with price data from 1989 (Allaway 1989c), and prices have increased from USD 14–29/kg to USD 45–50/kg in 1999 (table 2). Dublin and Jachmann (1992) at the time of their study in 1991 cite a price before the ban of USD 231–264/kg for raw ivory in Abidjan from the first to second middleman (that is, the carver), dropping to USD 99–132/kg for small to medium tusks.

Ivory workshops in West Africa

Six workshops were identified in Lagos, 14 in Abidjan and only 2 in Dakar (table 1). As in central Africa, vendors did not want to reveal the location of workshops. Stiles believes, based on informants' responses, that the survey established the location of all those in Abidjan, but it is probable that others not found exist in Lagos and Dakar. All informants complained of severe ivory shortages, and many carvers were working on alternative materials at the time of the visit. The origin of raw ivory was said to be DRC, CAR and Cameroon, in that order. A couple of people mentioned Gabon, and one craftsman even said ivory was flown in from Mozambique.



Daniel Stiles

A craftsman in Douala, Cameroon, shapes an ivory bust with an electric drill.

The main buyers are the local craft shops. In Lagos some Chinese buy directly from the workshops. In Abidjan, French, Japanese and Lebanese residents sometimes order certain pieces to be made or buy finished pieces on hand from factories. Japanese technical assistance workers and diplomats, even the ambassador, were said to be big buyers of ivory and paid high prices. Art gallery owners from Tokyo and France were said to come annually to buy worked ivory.

The carvers in Lagos and Abidjan said that business was not bad but that the scarcity of raw ivory and increasing prices were hurting them.



Esmond Martin

Most shops that offer ivory for sale in Djibouti-ville are small and are owned and managed by Somalis.

North-eastern Africa's legal position on ivory

DJIBOUTI

Djibouti acceded to CITES in 1992. All ivory items and tusks are imported as there is no carving industry. It is still legal to sell elephant ivory items and raw tusks within the country.

ETHIOPIA

The country became a party to CITES in 1989. Ethiopian law permits internal trade in tusks and carvings from ivory obtained legally from government auctions that were held until about 1990; since then, there has been no legal source of new tusks.

Retail sales of worked ivory in north-eastern Africa

Martin visited almost all the retail ivory shops in Addis Ababa and Djibouti-ville; they numbered 54 and 18 respectively with a total of 10,449 (453 of these in Djibouti-ville) ivory pieces for sale (see table 1). The shops offer a large variety of items including jewellery, wild animals, busts and name seals. Most of the commodities for sale are small, typical of most cities in Africa, because they are easier to hide in luggage. The main buyers in Djibouti are the French military and their families, while in Ethiopia, the customers are French and Italian tourists, Chinese

labourers, Japanese businessmen and diplomats, Koreans and a wide variety of foreign diplomats, UN employees and people attending conferences, according to traders interviewed.

Since the beginning of the recent war with Eritrea in May 1998, the ivory business has been very poor in Addis Ababa because most foreign tourists and businessmen have avoided coming to Ethiopia. Thus, the turnover in ivory commodities has declined by about 80%. In Djibouti, the shopkeepers also complained about poor sales, but the French military and their families are still purchasing ivory items.

Raw ivory prices in north-eastern Africa

The prices for raw ivory in Addis Ababa are much cheaper than in Djibouti because Ethiopia has its own elephant populations. Wholesale prices in Addis Ababa vary from an average of USD 28/kg for tusks less than 1 kg to USD 62.50 for large tusks over 25 kg. The raw ivory for the Ethiopian carving industry comes from a decreasing population of elephants within the country, from eastern Sudan and from Kenya. Djibouti-ville shop owners claim that they receive tusks from Somalia and Ethiopia, but as there is no carving industry in Djibouti, the tusks are sold retail in their raw state.

Ivory workshops in north-eastern Africa

Because of the recent collapse in the sales of worked ivory in Ethiopia, the number of craftsmen has also declined. Many have left the business to work on



South Africa used to be a major market for ivory commodities such as these in the photograph, but since the CITES ivory ban came into force in 1990, retail sales have plummeted by more than 95%.

wood, silver or gold. There may be 10 to 20 ivory craftsmen remaining in Addis Ababa, but most are not working full time in ivory. In 1999, the immediate future for the crafting and sales of worked ivory seemed bleak in Ethiopia.

Southern Africa's legal position on ivory

MOZAMBIQUE

Mozambique joined CITES in 1981. Internal trade in raw tusks is illegal, but the domestic trade in worked ivory is legal (H. Dublin, pers. comm., 2000).

SOUTH AFRICA

South Africa has been a member of CITES since 1975. Domestic trade in ivory is legal in the country.

ZIMBABWE

In 1981, Zimbabwe joined CITES. After the Tenth Meeting of the Conference of the Parties to CITES in 1997, Zimbabwe was allowed to export elephant hides, elephant leather goods and ivory carvings from September 1997, but for non-commercial purposes (Gray 1997).

Retail sales of worked ivory in southern Africa

Harare's shops have more ivory items for sale

(19,958) than any other city in Africa except Abidjan that Martin and Stiles visited (see table 1). However, almost all the items were made before 1990 when the international ban came into force. Since then, the sales of ivory have declined by over 90%.

The craftsmen in Zimbabwe used to make a large variety of ivory commodities, the most common ones being key rings, jewellery, boxes, wild animals and human figures. Less numerous are paper knives, napkin rings, hair clips, name seals and lamps. Now few of these items are bought because of the decline in demand for ivory pieces, and their retail prices are some of the lowest in Africa.

Compared with the late 1980s when the main customers were Americans, British and other Europeans, the main buyers of worked ivory in Zimbabwe now are a few Japanese and European visitors (especially the southern Europeans), and foreign diplomats including those from the Koreas and China.

In South Africa, the ivory business is even more depressed than in Zimbabwe. In the main cities of Johannesburg, Cape Town and Durban, there were at least 7386 ivory items for sale, but business is down by over 95% because of the lack of buyers. In addition to the locally made ivory goods, similar to the items produced in Harare, there are also older pieces made in China, Europe, Japan and Nigeria. The presence of imported old ivory pieces distinguishes the shops in South Africa from those in north-eastern and the rest of southern Africa.

Mozambique may be the only country in southern Africa where the retail ivory trade has not collapsed. This is because after the civil war in Mozambique ended in 1992, the country once again became stable. With amenities for tourists and businessmen improving in Maputo, foreigners are again visiting the capital city. There are about as many ivory items for sale in Maputo (3619) as in Durban. The main buyers in order of importance are Portuguese, Italian and Spanish.

Raw ivory prices in southern Africa

The prices for raw ivory in southern Africa are some of the lowest on the continent as a result of the col-

lapse in the demand for tusks and the sharp devaluation of local currencies. For example, the government of Zimbabwe sold tusks of 10 to 12/kg in the first half of 1999 for only USD 17.57/kg, while the craftsmen in Maputo paid USD 16.58/kg for tusks of similar quality weighing 6 to 10/kg, all from illegal sources.

Ivory workshops in southern Africa

The numbers of workshops and ivory craftsmen in Zimbabwe and South Africa have declined sharply since 1989. For example, in Zimbabwe in the mid-1980s about 200 craftsmen were consuming about 15 tonnes of raw ivory a year (Martin 1984) but in 1999 only 35 ivory craftsmen remained in the entire country. Informants said that there were at least eight workshops in Maputo, which employed approximately 100 carvers. There are no existing data from previous studies with which to compare the Maputo figures.

Summary results of the 1999 study

Table 1 aggregates 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, figures are given on the average prices for various weights of raw ivory in most major cities. Results of surveys in Egypt and Sudan undertaken by Martin in the late 1990s are included in the table, in addition to the 13 countries studied for the 1999 survey, along with data from Madzou and Moukassa (1996) for the Republic of the Congo.

Discussion

Trend in the ivory trade in Africa, 1989–1999

Unfortunately, available data in published and unpublished reports are not complete enough to allow full comparisons between trade now and earlier. In this section, as well as the 13 African countries surveyed in 1999, Egypt and the Sudan are also included from earlier work undertaken by Martin (1998, 2000) to give a more com-

prehensive understanding of the ivory trade on the continent. Tables 2, 3 and 4 present data on the prices of raw ivory, numbers of workshops, number of craftsmen and the prices of selected ivory items over time, mostly comparing the 1980s with 1999.

Conclusion

This study is the first of its kind 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 and factories in these countries. Follow-up surveys and proper analysis of the data in future years will enable conservationists and government officers to decide whether the demand for ivory has increased or decreased because of CITES-approved sales. Rational decisions could then be made based on scientific data from the surveys on whether future ivory sales should be allowed.

Retail sales of ivory items in Africa

At least 110,000 pieces of worked ivory were seen in the main cities of the 13 countries visited during the 1999 survey, plus Egypt and Sudan, surveyed earlier. Thousands more are found in the Republic of the Congo and other places not visited. The sale of worked ivory is slow everywhere, however, except in Lagos, Abidjan and Douala. Retail sales are down in most of the cities in north-eastern and southern Africa by 65 to 95% compared with what they were in the late 1980s. In central and West Africa, retail sales are down



Patrick Mavros, a well-known Zimbabwean artist, is examining one of his ivory animals in his workshop just outside Harare.



The sale of ivory items made in Ethiopia has declined sharply in Addis Ababa since mid-1998, because of the Ethiopian–Eritrean War, which scared away foreign tourists.

everywhere from 1989 except for Lagos, where there is a moderate rise.

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 the buyers take the ivory items out of the countries in contravention of CITES and national laws. The main customers for ivory in Djibouti are French army personnel and their families. 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.

The main retail buyers of worked ivory throughout the continent, 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. Fairly significant buyers are Japanese, Portuguese and Latin Americans. The most popular pieces are small items, especially jewellery, as they are easy to hide in luggage. The large carved tusks and other big pieces sell extremely slowly in most places, and many of these were carved before the 1990 CITES ban.

The wholesale market of ivory items and raw tusks in Africa

The main customers for ivory are the Chinese and the North and South Koreans, who transport these

goods to sell in eastern Asia. African businessmen, mainly Senegalese and Nigerians, buy substantial quantities of worked ivory in certain central and West African countries to transport to other countries in the region.

Ivory from eastern DRC and CAR goes to north-eastern Africa. Egyptian ivory markets are also partly supplied from elephants poached in Cameroon, and a little ivory is brought in by Muslim pilgrims from Nigeria. The main raw ivory sources for the West African markets are DRC, CAR, Cameroon and Gabon, probably in that order. Ivory from eastern DRC and CAR goes north-west to Nigeria

and to Abidjan and Dakar. Maiduguri in northern Nigeria is a main transit centre for the western trade. Ivory from Gabon leaves Libreville by three main routes: by ship, 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 or transported to Douala or sent on to Nigeria. Some tusks from Cameroon enter Nigeria via Calabar by boat on their way to Onitsha, where some is worked and some is sent on to Lagos to be worked. Ivory from Cameroon and elsewhere that enters northern Nigeria via Maiduguri goes to Kano. Some is crafted and sold there, some goes to Lagos, and some is transported to Abidjan or Dakar by road.

Raw and worked ivory exports off the African continent

Traders in Mozambique, Gabon, Nigeria, DRC, Sudan, and especially Cameroon, illicitly export tusks to Europe (usually in transit to Asia), China, South Korea and Taiwan. North Korean diplomats are notorious for smuggling worked ivory items as well as tusks. They are even supported by their government to do so, probably a unique situation (Kaplan et al., 1999).

Future ivory sales

The authors believe that advertising and holding another auction in Africa, as proposed by four southern

African countries at CITES 2000, would strengthen the current misconception, brought about by faulty reporting, that the international trade in ivory is now condoned, and that this could stimulate the search for additional ivory stocks in anticipation of a more robust market. It is the common perception amongst ivory traders and craftsmen, and probably an accurate one, that many more people would buy more and larger pieces of worked ivory if they could carry or export them legally to their home countries. In many parts of southern Africa this increased trade might 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, and their value to tourism exceeds the value of their ivory (Brown and Henry 1993).

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