TRAFFIC

REPORT

SEPTEMBER 2017

IVORY MARKETS IN CENTRAL AFRICA

Market Surveys in Cameroon, Central African Republic, Congo, Democratic Republic of the Congo and Gabon: 2007, 2009, 2014/2015

Sone NKOKE Christopher, Jean-François LAGROT, Stéphane RINGUET and Tom MILLIKEN





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Published by TRAFFIC Central Africa Regional office Yaoundé, Cameroon and TRAFFIC International, Cambridge.
Design by: Hallie Sacks

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UK Registered Charity No. 1076722 Suggested citation: Nkoke, S.C. Lagrot J.F. Ringuet, S. and Milliken, T. (2017). Ivory Markets in Central Africa – Market Surveys in Cameroon, Central African Republic, Congo, Democratic Republic of the Congo and Gabon: 2007, 2009, 2014/2015. TRAFFIC. Yaoundé, Cameroon and Cambridge, UK.

Front cover photograph and credit: Ivory confiscated by the Cameroon Ministry of Forests and Wildlife © WWF / Mike Goldwater

The 2014/2015 market surveys and this report were made possible with support from the American people, delivered through the U.S. Agency for International Development (USAID) through the Wildlife Trafficking, Response, and Priority Setting (Wildlife TRAPS) Project. The 2007 and 2009 surveys were supported by the French Ministry of Ecology, Sustainable Development, Transport and Housing (MEDDTL), WWF France and the WWF Species Programme. The contents are the responsibility of the authors and do not necessarily reflect the opinion of USAID, the MEDDTL, the U.S. Government or the French Government.

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Ivory confiscated by the Cameroon Ministry of Forests and Wildlife. $\, @$ WWF / Mike Goldwater



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Surveys

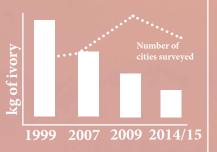
Cameroon | Congo | Gabon Central African Republic Democratic Republic of Congo

2007

971 kg of ivory 4,722 ivory items 93 outlets 2009

634 kg of ivory 3,987 ivory items 119 outlets 2014/2015

401 kg of ivory 4,255 ivory items 32 outlets





Total 2007–2015 2,006 kg of ivory 12,964 ivory items 244 outlets

68%

Kinshasa, DRC alone accounted for more than two-thirds of ivory items retailed in open markets In 2015, more than

26,000 kg

of ivory resided in national stocks in Central Africa

More than

53,700 kg

of ivory from Central Africa was seized globally between 2007–2015

Equivalent to approximately

5,712 elephants

4x

as much ivory is getting out of Central Africa before being seized than is being seized in-country

ABBREVIATIONS AND ACRONYMS

ACFAP Agence congolaise de la faune et des aires protégées (Congolese

Agency for Wildlife and Protected Areas

Republic of Congo)

ALCRIF Application de la loi et lutte contre la criminalité faunique en

République Démocratique du Congo

(Law Enforcement against wildlife criminality in DRC)

ANPN Agence Nationale des Parcs Nationaux – Gabon (Gabonese National

Parks Agency)

AU African Union

AUAIC Ivory Workers' Unions in the DRC

CAR Central African Republic

CITES Convention on International Trade in Endangered Species of Wild Fauna

and Flora

CJ Conservation Justice – Gabon (NGO)

CMA Confédération du Monde des Artisans (Confederation of Artists - DRC)

CNS Conférence Nationale Souveraine (Sovereign National Conference)

COMIFAC Commission des Forêts d'Afrique Centrale (Central African Forest

Commission)

CoP Conference of Parties (of CITES)

DRC Democratic Republic of the Congo

EAGLE Eco-Activists for Governance and Law Enforcement (NGO)

ECCAS Economic Commission of Central African States

ECOFAC Programme de Conservation et Utilisation Rationelle des Ecosystèmes

Forestiers en Afrique Centrale (Forest conservation

and sustainable management programme in Central Africa)

ETIS Elephant Trade Information System

European Union

FARDC Forces Armées de la République Démocratique du Congo (The

Armed Forces of the Democratic Republic of the Congo)

FC Congolese (DRC) Franc

FCFA Francs Communauté Financière Africaine (African Financial

Community Francs)

FDLR Front Démocratique de Libération du Rwanda (Democratic Forces for the

Liberation of Rwanda)

FOCAC Forum on China-Africa Cooperation

Deutsche Gesellschaft für Internationale Zusammenarbeit **GIZ**

(German Corporation for International Cooperation)

ICCN Institut Congolais de Conservation de la Nature (Congolese Institute for

the Conservation of Nature - DRC)

IDPE Institute of Development Professionals in Education

IGO Inter-Governmental Organization

INTERPOL International Police Organization

IUCN International Union for the Conservation of Nature

LAB Lutte Anti Braconnage (Anti-poaching)

LAGA Last Great Ape Organization – Cameroon (NGO)

LRA Lord's Resistance Army

MA **CITES Management Authority**

MDDEFE Ministère du Développement Durable, de l'Economie

> Forestière et de l'Environnement - République du Congo (Ministry of Sustainable Development of Forest

Economy and Environment – Republic of Congo)

MEDDTL

Ministère de l'Ecologie, du Développement Durable, du Transport et du Logement - France (Ministry of Ecology,

Sustainable Development, Transport and Housing - France)

MEFCPT Ministère des Eaux et Forêts, Chasse, Pêche et Tourisme - République

Centrafricaine (Ministry for Water, Forests,

Hunting, Fishing and Tourism - Central African Republic)

MEFDD Ministère de l'Economie Forestière et de développement durable

République de Congo (Ministry of Forest Economy and

Sustainable Development – Republic of Congo)

MFEPRN Ministère de la Forêt, de l'Environnement et de la Protection des

Ressources Naturelles (Ministry of Forest, Environment and

Protection of Natural Resources - Gabon)

National Coordination Unit **NCU**

NIAP National Ivory Action Plan **MIKE** Monitoring the Illegal Killing of Elephants **MINEF** Ministère des Eaux et Forêts – Gabon (Ministry of Water and Forests - Gabon) **MINFOF** Ministère des Forêts et de la Faune – Cameroun (Ministry of Forest and Wildlife - Cameroon) **MONUC** Mission de l'Organisation des Nations-Unies en République Démocratique du Congo (United Nations Mission in the Democratic Republic of the Congo) NGO Non-Governmental Organization **PALF** Projet d'Appui à l'Application de la loi sur la Faune Sauvage -République du Congo (Wildlife Law Enforcement Project – Republic of Congo; NGO) Plan d'Action sous Régional des Pays de l'Espace COMIFAC **PAPECALF** pour le Renforcement de l'Application des Législations Nationales sur la Faune Sauvage (Central African Wildlife Trade Law Enforcement Action Plan – CAWTLEAP of COMIFAC) Plan d'Action d'Urgence de Lutte Anti-Braconnage (Urgent **PAULAB** Anti-Poaching Action Plan) **PIKE** Proportion of Illegally Killed Elephants **RALF** Renforcement de l'Application de la Loi Faunique - République Centrafricaine (Reinforcement of the Application of Wildlife Law - CAR, NGO) Rassemblement Congolais pour la Démocratie (Congolese Rally for **RCD** Democracy) **RFO** Réserve de Faune des Okapis (Okapi Faunal Reserve) - DRC **SETRAG** Sociéte d'Exploitation du Transgabonais (Trans Gabon Railway) Tri-National Dja (Cameroon) – Odzala (Congo) – Minkebe (Gabon) **TRIDOM United Nations** UN **UNARICO** Union des Artistes Ivoiriers du Congo (Union of Ivory Artists of Congo - DRC) **USAID** United States Agency for International Development **USD** United States Dollar VIP Very Important Personality **WCS** Wildlife Conservation Society (NGO)

Wildlife TRAPS	Wildlife Trafficking, Response, Assesssment, and Priority Se	etting roject
WRI	World Resources Institute (N	(IGO
WWF	World Wide Fund for Nature (N	VGO)
ZSL	Zoological Society of London (N	VGO)
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ACKNOWLEDGEMENTS

During the course of the various studies reported here, many individuals supported the authors with their time, expertise, original research and professional advice. Special thanks in this regard go to the numerous people who provided valuable information through interviews and/or correspondences. Firstly, this report would not have been possible without the assistance and cooperation of the management and other government authorities of Cameroon, CAR, Congo, DRC and Gabon. Some officials of relevant institutions in the above countries who assisted in this work include; Samuel Ebia Ndongo, Jean Medjo, Lekealem Joseph, Zourmba Juoullier, Zambo Frank Thierry, Aboubakar Kouotou, Pandong Eitel Marcellin, Amende Daniel of MINFOF (Cameroon); Adrien Noungou of MINEF (Gabon); Meye Brice Leandre of MFEPRN (Gabon); Donatien Nzala, Dieudonné Moubiala of MDDEFE and Roger Albert Mbete of MEFDD (Republic of Congo); Théophile Momokoama, Kango Martin, César Manzangué, Matonga Albert, Ndallot Olobanda Jérémie, Emmanuel Melvis Ngoumbango, Alfred Mbat Sepamio and Mbailao Jasmine of MEFCPT (CAR); Boyzibu Pierre, Cosma Wilungula Balongelwa and Thierry Katsuva Kambale of ICCN (DRC).

Particular thanks are due to Steven Broad, Roland Melisch, Germain Ngandjui, Julie Gray, Richard Thomas, Cleo Mashini and Nathalie West (TRAFFIC), Jochen Krimphoff and Cordelia Britton (WWF France) and Marianne Courouble who provided advice and assistance during the project and reviewed drafts of the report. Special thanks go to Nick Ahlers and Paulinus Ngeh, both of TRAFFIC, for their continued support and directives during the period of the 2014/2015 study.

The authors would also like to appreciate the contributions of the following: Joseph Kpoumie of Cameroon Customs, Jean-Baptiste Mamang of ECCAS in Gabon, and Olivier Rekian Dokouna and Tiburce Conjugo of the Customs Department in CAR.

Several individuals eased the work of the authors through facilitating contacts with officials in various countries, logistic arrangements, data collection, data verification etc. The authors are deeply indebted to these individuals who include: Alain Ononino (WWF Cameroon); Anoah Humphrey Ekane (ZSL Cameroon); Ofir Drori (LAGA/EAGLE network); Pauwel de Watcher (WWF Gabon); Anne-Marie Ndongobiang and Romain Calaque (WCS Gabon); Luc Mathot and Wilde Rosny Ngalekassanga of CJ (Gabon); Jérome Mokoko (WCS Congo); Naftali Honig and Adelphe Makosso of PALF (Congo); Florent Zowoya (ECOFAC); Jaap Schoorl and Sylvie Ouellet (GIZ - DRC); Jean-Pierre Mirindi (TRAFFIC consultant); Térèse Hart and Maga Booto (Project TL2); Emmanuel de Merode (Virungas National Park); Bantu Lukembo (IDPE); Renaud Fulconis, Le Père Gabriel Priou, Constance Mafuta, Mr. Male and Marie Laure Dompagne, Jean Bernard Yarissem and Hubert Yamande Koulayom of WWF (CAR); Joe Kassongo (Juristrale - DRC); Bruno Perodeau, Garry Miller and Alfred Yoko all of WWF (DRC).

The authors equally appreciate and thank the numerous informants and professional investigators who were involved directly or indirectly in the study and whose names cannot be mentioned here for obvious reasons. Financial support for this study was provided by the French Ministry of Ecology, Sustainable Development, Transport and Housing, WWF France, the WWF Species Programme and the United States Agency for International Development (USAID) through the Wildlife Trafficking, Response, Assessment and Priority Setting Project (Wildlife-TRAPS) and the International Union for the Conservation of Nature (IUCN).



EXECUTIVE SUMMARY

Central Africa has been identified as one of the main sources of illegal ivory fueling unregulated domestic ivory trade throughout West and Central Africa and overseas destinations, especially Asia, in recent years. This report presents the results of field surveys of ivory markets carried out in 11 cities of five Central African countries in 2007, 2009, 2014 and 2015 by two different researchers, one in 2007 and 2009, and another in 2014 and 2015, using the same methodology. The aim was to assess the status and trends of domestic ivory trade in the region following the last substantial study in Central Africa, undertaken by Martin and Stiles in 1999, which established a baseline in key markets from which future changes could be assessed (Martin & Stiles, 2000).

The countries surveyed include Gabon, Republic of Congo (referred to as Congo in this report), Central African Republic (CAR), Democratic Republic of Congo (DRC) and Cameroon. The surveys took place between the 9th of April and the 18th of May 2007, between the 24th of March and the 28th of May 2009, and from October 2014 to June 2015, with additional information acquired in November 2015 for DRC. All countries were surveyed in 2007, but in 2009, surveys were not done in Cameroon; in 2014 surveys were done only in Cameroon and Congo; and in 2015, surveys were done in CAR, DRC and Gabon. These differences in the scope of surveys sometimes rendered the determination of trends and comparison of data difficult. However, collectively, it provides valuable information on the evolving situation in various countries and provides an indication of trade trends.

The same key indicators used by Martin and Stiles in 1999 were used for these surveys: the quantity of displayed retail worked ivory products and their prices, the number of retail outlets where ivory items were being sold, the number of ivory workshops and craftsmen, and the sources of raw ivory and raw ivory prices. More information was sought on the profile of buyers, sellers and traffickers of both worked and raw ivory, the transport routes taken, concealment methods used, and the status of ivory stockpile management, legislation and policy in the target countries. Considering the sensitive nature of the trade, information was reluctantly given in some cases, thereby creating information gaps in some areas in comparison with previous studies. Over the period of study, there was general suspicion amongst market vendors and new tactics had to be creatively developed to convince reluctant traders, workshop owners and vendors to divulge information.

Despite certain information gaps and other challenges faced during the various surveys, the following key findings were made on the status and trends of ivory markets in Central Africa:

Current legislation in the five countries, with the exception of Cameroon, prohibits domestic ivory trade. However, there is a loose and ambiguous interpretation of the law in all countries, not only by the authorities in charge of enforcement, but also by many other actors. In some countries, there is confusion regarding who has the

- responsibility for the control and monitoring of ivory trade. Wildlife legislation has been recently updated in Congo and DRC but effective implementation remains an issue. Law enforcement efforts are visible with no ivory or very small quantities traded in all of the countries visited except DRC, where the ivory market in Kinshasa was still thriving. These enforcement efforts are hampered by corruption, often involving high-level governmental officials, insufficient human and financial resources, mismanagement and weak political will.
- There are several deficiencies in governmentheld ivory stockpile management and seizure registration when compared with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) requirements. During the surveys of 2007 and 2009, for example, Gabon refused access to the official government ivory stockpiles illustrating either a lack of transparency in the system or security reasons, given that the request was made by a non-governmental organization (NGO). The lack of transparency is not unique to Gabon as there is no robust and transparent mechanism in place to ensure effective management of stockpiles in all the target countries. Findings showed that more than 15,000 kg of ivory in total in all the countries were in national stockpiles in 2007, more than 21,000 kg in 2009 and over 26,000 kg in 2015. Some countries such as Gabon, Congo and Cameroon incinerated part of their stocks, especially stocks for which court cases were completed.
- Generally, open ivory markets have been declining throughout Central Africa since 1999. Overall trends over the years of the study indicate a drop in all aspects of ivory business, including the number of items observed for sale, the quantity of ivory these products represented and the number of outlets. For all the years studied, a total of over 2,000 kg of worked ivory were on sale representing 12,964 ivory items in 244 outlets. DRC alone accounted for 1,355 kg of ivory items sold, more than 65% for the whole subregion. In the other countries (Cameroon, CAR, Congo and Gabon) the volume of worked ivory displayed over time since 1999 showed a major decrease. From 2007 to 2015, there was almost 100% decrease in displayed ivory items with

"This report presents the results of field surveys of ivory markets carried out in 11 cities of five Central African countries in 2007, 2009, 2014 and 2015"

investigations revealing about 0.5 kg in Bangui, CAR and Pointe Noire, Congo in 2014/2015. In contrast, the volume of ivory traded in Kinshasa, DRC remained relatively stable over the years, hovering around 400 kg and 500 kg of worked ivory, as seen in 2015. Law enforcement efforts and increasing interventions from the authorities were highlighted throughout the region by retailers and carvers as having a detrimental impact on the ivory business. Some also cited the scarcity of raw ivory as the reason for the decline in the availability of worked ivory products for sale.

- Wood carving is now the main craft activity in retail curio markets and ivory carving is now mostly done upon an order and only when raw ivory is available. Another noticeable feature, with regards to supply concerns, is reduced tusk sizes. The sizes of the tusks in trade have been gradually, and then rapidly, decreasing over the last few years. Much smaller ivory pieces were found in the craft markets in recent years as compared to the past and, with the increasing shortage of supply, large worked ivory articles are said to be sold as raw material to be converted into smaller and easier to sell items.
- Information collected during the surveys in most of the Central African cities visited showed that ivory trade in the region is shifting from an open domestic retail trade of worked ivory to underground transactions with a focus on the export of raw ivory to foreign markets, especially China. The concealment of the market is mostly because of looting by armed groups—including rebels engaged in civil unrest in some countries such as DRC, Congo and CAR—and increasing pressure from the authorities conducting frequent law enforcement operations. There are also reports of the involvement of well-organized criminal networks that are spread throughout the region who focus on the export of raw ivory, mainly to

Asia, and this has reduced the availability of ivory for local markets. This partly explains why, in spite of the consistent reports of ongoing elephant poaching in the DRC during the 2009 survey, only a limited amount of ivory was observed in local ivory markets.

- Ethnic Chinese nationals were by far the most frequently identified buyers of ivory, representing most of the demand for worked and raw ivory in the region. Chinese buyers have replaced European expatriates and tourists, who were previously the main buyers as reported in the 1999 survey by Martin & Stiles (2000). In Congo, ethnic Chinese are reported to be transforming ivory in-country at their project sites, most of which are located in remote areas from where it is transported to bigger cities, such as Brazzaville, and then exported abroad. Like in 1999, West African traders were also mentioned as secondary customers, buying raw and worked ivory to supply West African and international markets.
- Ivory sources are nowadays confined to certain well-known areas such as Salonga National Park in DRC, a large area encompassing south-eastern Cameroon, south-western and north-eastern CAR, northern Gabon and northern Congo. Some ivory enters Congo from Angola, and DRC from Zambia via Lubumbashi, and then leaves the sub-region mostly exiting from Cameroon to Nigeria; DRC to Rwanda, Uganda, Burundi, or Tanzania; and CAR to Chad or Sudan. The regional movement of ivory has not changed much during the last decades, with traffickers using the same traditional routes, roads and rivers with two basic scenarios prevailing. One scenario involves Cameroon and Gabon, with constant movements of poached ivory across the border of northern Gabon into southern Cameroon, and then westward by road to coastal ports in Cameroon and Nigeria. The other scenario consists of the DRC and Congo using the Congo River as an important and easy means of transport for raw ivory poached in northern and eastern Congo and DRC, with a constant movement of worked and raw ivory between the two capital cities of Brazzaville and Kinshasa, which sit on opposite sides of the river. In addition to the two dominant scenarios is CAR, which in addition to being a source country for ivory, often also serves as a country of transit for illegal ivory originating in the Bangassou area or from neighbouring DRC

- and exported westward, mainly by road to Cameroon (Yaoundé then on to Douala) then to Nigeria, and also by boat on the Oubangui river to supply Brazzaville. In addition to the transit aspect, CAR's elephant populations have been severely depleted, especially in the northeastern and eastern areas by heavily armed and organized poachers-mostly Sudanese, Chadian and Séléka rebels. In the eastern part of DRC, with rebels in the mix, raw ivory poached in the area in most cases crosses the borders to Rwanda, Burundi, Uganda or Tanzania for further export to Asian destinations.
- The increasing shortage of ivory in recent years has resulted in increases in the price of raw ivory in most of the countries studied. The average prices for raw ivory, which were relatively stable from 1999 to 2007, had increased by at least 20% from 2007 to 2016 in all the countries, and up to 60% in Pointe Noire, Congo. With the price of raw ivory reaching new all-time high levels, most of the encountered vendors and carvers complained they could not afford raw ivory and many commission carvers were finding little alternative but to give up their ivory carving businesses because they could not compete with the lucrative export trade.

The ten recommendations proposed broadly cover issues such as scaling up law enforcement performance against illegal wildlife trade, the harmonization of wildlife legislation nationally and regionally, inter-agency and regional collaboration, effective use of the elephant trade information system (ETIS), commitment to and effective implementation of the national ivory action plans (NIAPs), effective stockpile management, paradigm shift of stakeholders, permanent close-down of the Kinshasa ivory market in DRC, regular surveys (every two years), and monitoring of action towards commitments.

"For all the years studied, a total of over 2,000 kg of worked ivory were on sale representing 12,964 ivory items in 244 outlets."



RÉSUMÉ

L'Afrique centrale a été identifiée comme l'une des principales sources d'approvisionnement illégal en ivoire du commerce national d'ivoire non réglementé dans toute l'Afrique de l'Ouest et centrale, et dans les destinations étrangères, en particulier en Asie au cours des dernières années. Ce rapport présente les résultats des enquêtes de terrain sur les marchés d'ivoire réalisées dans 11 villes de cinq pays d'Afrique centrale en 2007, 2009, 2014 et 2015 par deux chercheurs ayant opéré en 2007 et 2009 pour l'un et en 2014 et 2015 pour l'autre, en suivant la même méthodologie. L'objectif était d'évaluer l'état et les tendances du commerce intérieur de l'ivoire dans la sous-région depuis la dernière étude importante menée par Martin et Stiles en Afrique centrale en 1999, qui a établi une base de référence sur les marchés clés à partir de laquelle des changements futurs pourraient être évalués (Martin et Stiles, 2000). Ce travail s'est focalisé sur le Gabon, la République du Congo (désignée ci-après Congo), la République centrafricaine (RCA), la République démocratique du Congo (RDC) et le Cameroun du 9 avril au 18 mai 2007; du 24 mars au 28 mai 2009; et d'octobre 2014 à juin 2015 ; avec des informations additionnelles recueillies en novembre 2015 pour la RDC. Des enquêtes ont été menées dans tous les pays en 2007; mais en 2009, des enquêtes n'ont pas eu lieu au Cameroun ; en 2014, les enquêtes ont été réalisées uniquement au Cameroun et au Congo et en 2015, en RCA, en RDC et au Gabon. Ces différences dans la portée des enquêtes ont rendu parfois difficile le dégagement des tendances et la comparaison des données. Cependant, globalement, ces dernières fournissent des informations précieuses sur l'évolution de la situation dans divers pays et une indication des tendances du commerce.

Les mêmes indicateurs clés utilisés par Martin et Stiles en 1999 ont été utilisés pour ces enquêtes : la quantité de produits en ivoire vendus au détail et leurs prix, le nombre de points de vente des produits en ivoire, le type de produits en ivoire vendus et leur prix de vente au détail, le nombre d'ateliers et d'artisans, ainsi que les sources de l'ivoire brut et de son prix. Des informations additionnelles ont été recherchées sur le profil des acheteurs, des vendeurs et des trafiquants d'ivoire travaillé et brut, les itinéraires de transport empruntés, les méthodes de dissimulation utilisées, les cadres législatifs et politiques pertinents relatifs au

commerce de l'ivoire ainsi que le statut de la gestion nationale des stocks d'ivoire dans les pays cibles. Compte tenu de la nature sensible du commerce de l'ivoire, les informations ont été données à contrecœur dans certains cas, créant ainsi des lacunes en matière d'information dans certains domaines par rapport aux études antérieures. Au cours de la période d'étude, les vendeurs sur les marchés étaient généralement méfiants, et de nouvelles tactiques ont dû être développées avec créativité pour convaincre les commerçants, les propriétaires d'ateliers et les vendeurs réticents de divulguer des informations.

En dépit de certaines lacunes en matière d'information et d'autres défis rencontrés lors des différentes enquêtes, ces dernières ont donné lieu aux principaux résultats suivants sur l'état et les tendances des marchés d'ivoire en Afrique centrale:

- La législation actuelle dans les cinq pays, à l'exception du Cameroun, interdit le commerce intérieur de l'ivoire. Cependant, il existe une interprétation large et ambiguë de la loi dans tous les pays, non seulement par les autorités chargées de l'application de la loi, mais aussi par de nombreuses parties prenantes. Dans certains pays, il existe même une confusion quant à savoir qui a la responsabilité du contrôle et du suivi du commerce de l'ivoire. La législation sur la faune sauvage a été récemment mise à jour au Congo et en RDC, mais sa mise en œuvre effective reste problématique.Des efforts d'application de la loi sont visibles, avec aucune ou de très faibles quantités d'ivoire commercialisées dans tous les pays visités, à l'exception de la RDC où le marché de l'ivoire à Kinshasa continue de prospérer. Ces efforts d'application de la loi sont cependant entravés par la corruption, impliquant souvent des fonctionnaires gouvernementaux de haut niveau, des ressources humaines et financières insuffisantes, une mauvaise gestion et une faible volonté politique.
- Il existe plusieurs lacunes dans la gestion des stocks gouvernementaux d'ivoire et l'enregistrement des saisies par rapport aux exigences de la Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction (CITES). Par exemple, au cours des enquêtes de 2007 et 2009, le Gabon a refusé l'accès aux stocks officiels d'ivoire du gouvernement traduisant soit un manque de transparence dans le système, soit un souci de sécurité étant donné que la demande a

- été faite par une ONG. Le manque de transparence n'est pas spécifique au Gabon ; en effet il n'existe pas de système solide et transparent pour assurer une gestion efficace des stocks dans les autres pays cibles. Les résultats ont montré qu'au total plus de 15 000 kg étaient enregistrés dans des stocks nationaux dans tous les pays en 2007, plus de 21 000 kg en 2009 et plus de 26 000 kg en 2015. Certains pays comme le Gabon, le Congo et le Cameroun ont incinéré une partie de leurs stocks, en particulier les stocks pour lesquels des poursuites judiciaires ont été complétées.
- D'une manière générale, les marchés ouverts à la vente d'ivoire ont diminué dans toute l'Afrique centrale depuis 1999. La tendance générale au cours des années de l'étude indique une baisse de tous les aspects de l'activité liée à l'ivoire, y compris le nombre d'articles observés pour la vente, la quantité de produits en ivoire et le nombre de points de vente. Sur l'ensemble des années couvertes par l'étude, un total de plus de 2000 kg d'ivoire travaillé était en vente représentant 12 964 objets en ivoire dans 244 points de vente. A elle seule, la RDC représentait 1355 kg d'articles en ivoire disponibles à la vente (ou exposés), soit plus de 65% des articles pour l'ensemble de la sousrégion. Dans les autres pays (Cameroun, RCA, Congo et Gabon), le volume d'ivoire travaillé enregistré depuis 1999 a fortement diminué. De 2007 à 2015, il y a eu près de 100% de diminution des objets d'ivoire enregistrés au cours des enquêtes révélant environ 0,5 kg à Bangui, RCA et à Pointe Noire, Congo en 2014/2015. En revanche, le volume d'ivoire commercialisé à Kinshasa, RDC, est resté relativement stable au fil des années, atteignant environ 400 kg et 500 kg d'ivoire travaillé, comme cela a été observé en 2015. Les efforts d'application de la loi et les interventions croissantes des autorités ont été mis en avant dans la sous-région par les détaillants et les sculpteurs comme ayant eu un impact préjudiciable sur l'activité liée à l'ivoire. Certains ont également cité la rareté de l'ivoire brut comme motif de la baisse de la disponibilité des articles d'ivoire travaillé en vente.
- La sculpture sur bois est actuellement la principale activité artisanale dans les marchés de curiosités, et la sculpture sur l'ivoire est maintenant principalement effectuée sur commande et uniquement lorsque l'ivoire brut est disponible. Une autre caractéristique

- notable en ce qui concerne l'approvisionnement, concerne la taille des défenses dans le commerce qui a progressivement, puis rapidement, diminué au cours des dernières années. Par rapport au passé, des pièces d'ivoire beaucoup plus petites ont été trouvées sur les marchés de l'artisanat au cours des dernières années et, avec la pénurie croissante d'approvisionnement, les grands articles d'ivoire travaillé sont dits être vendus comme matières premières à convertir en articles plus petits et plus faciles à vendre.
- Les informations recueillies au cours des enquêtes dans la plupart des villes d'Afrique centrale visitées ont révélé que le commerce de l'ivoire dans la sous-région passe d'un commerce domestique ouvert d'ivoire travaillé de détail aux transactions souterraines, en mettant l'accent sur l'exportation d'ivoire brut sur les marchés étrangers, en particulier la Chine. La dissimulation du marché s'explique principalement par le pillage de groupes armés, dont des rebelles impliqués dans des troubles civils dans certains pays tels que la RDC, le Congo et la RCA, et la pression croissante des autorités effectuant de fréquentes opérations d'application de la loi. Il existe également des rapports sur la participation de réseaux criminels bien organisés qui se répandent dans toute la sous-région et se concentrent sur l'exportation d'ivoire brut principalement vers l'Asie, ce qui a réduit la disponibilité de l'ivoire pour les marchés locaux. Cela explique en partie pourquoi, malgré les rapports constants du braconnage continu des éléphants en RDC au cours de l'enquête de 2009, seule une quantité limitée d'ivoire a été observée sur les marchés locaux d'ivoire.
- Les ressortissants chinois étaient de loin les acheteurs d'ivoire les plus fréquemment identifiés, représentant la plupart de la demande d'ivoire brut et travaillé dans la sous-région. Les acheteurs chinois ont remplacé les expatriés et les touristes européens, qui étaient auparavant les principaux acheteurs, comme indiqué dans l'enquête de 1999 par Martin et Stiles (2000). Au Congo, il est rapporté que les Chinois transformeraient l'ivoire sur place dans leurs sites de projets, dont la plupart sont situés dans des zones éloignées d'où il est transporté vers des villes plus importantes, comme Brazzaville, et ensuite exporté à l'étranger. Comme en 1999, les commerçants de l'Afrique de l'Ouest ont

- également été mentionnés comme des clients secondaires, achetant de l'ivoire brut et travaillé pour approvisionner les marchés de l'Afrique de l'Ouest et internationaux.
- Les sources d'ivoire sont aujourd'hui confinées à certaines zones bien connues telles que le parc national de Salonga en RDC, une grande zone englobant le sud-est du Cameroun, le sud-ouest et le nord-est de la RCA, le nord du Gabon et le nord du Congo. Un peu d'ivoire entre au Congo de l'Angola, et de la RDC depuis la Zambie via Lubumbashi, puis quitte la sous-région sortant le plus souvent du Cameroun au Nigéria, de la RDC au Rwanda, en Ouganda, au Burundi ou en Tanzanie, et de la RCA au Tchad ou au Soudan. Les déplacements régionaux de l'ivoire n'ont pas beaucoup changé au cours des dernières décennies, les trafiquants utilisant les mêmes routes, chemins et rivières traditionnels avec deux scénarios fondamentaux. Un scénario implique le Cameroun et le Gabon avec des mouvements constants d'ivoire illégal/braconné à travers la frontière du nord du Gabon vers le sud du Cameroun, puis vers l'ouest par la route vers les ports côtiers au Cameroun et au Nigéria. L'autre scénario concerne la RDC et le Congo qui utilisent le fleuve Congo comme moyen de transport facile et important d'ivoire brut braconné dans le nord et l'est du Congo et de la RDC, avec un mouvement constant d'ivoire travaillé et brut entre les deux capitales de Brazzaville et Kinshasa, seulement séparées par le fleuve. En plus de ces deux principaux scénarios, la RCA, qui en plus d'être un pays source, sert souvent de pays de transit pour l'ivoire illégal originaire de la région de Bangassou ou de la RDC voisine. L'ivoire est alors exporté vers l'ouest, principalement par la route vers le Cameroun (Yaoundé puis à Douala) puis au Nigéria, et aussi en bateau sur la rivière Oubangui pour approvisionner Brazzaville. En plus de l'aspect de transit, les populations d'éléphants de la RCA ont été sévèrement réduites, en particulier dans les régions du nord-est et de l'est, par des braconniers lourdement armés et organisés, principalement des rebelles soudanais, tchadiens et centrafricains de la Séléka. Dans la partie orientale de la RDC, avec l'influence des rebelles, l'ivoire brut illégal/braconné dans la région traverse, dans la plupart des cas, les frontières vers le Rwanda, le Burundi, l'Ouganda ou la Tanzanie pour ensuite être exporté vers les destinations asiatiques.



La pénurie croissante d'ivoire au cours de ces dernières années a entraîné une augmentation du prix de l'ivoire brut dans la plupart des pays étudiés. Les prix moyens de l'ivoire brut, relativement stables de 1999 à 2007, ont augmenté d'au moins 20% de 2007 à 2016 dans tous les pays et jusqu'à 60% à Pointe Noire, au Congo. Avec le prix de l'ivoire brut atteignant des niveaux historiquement élevés, la plupart des vendeurs et des sculpteurs rencontrés se sont plaints qu'ils n'avaient pas les moyens d'avoir de l'ivoire brut et de nombreux sculpteurs commissionnaires trouvaient peu d'alternatives que d'abandonner leurs entreprises de sculpture en ivoire parce qu'ils ne pouvaient pas concurrencer le commerce lucratif à l'export.

Les dix recommandations proposées couvrent de manière générale des questions telles que le renforcement de l'application de la loi contre le commerce illégal de la faune sauvage, l'harmonisation de la législation sur la faune sauvage à l'échelle nationale et régionale, la collaboration interorganisations et régionales, l'utilisation efficace du système d'information sur le commerce des éléphants (ETIS), l'engagement pour la mise en œuvre effective des plans d'action nationaux pour l'ivoire (PANI), la gestion efficace des stocks d'ivoire, le changement de paradigme des parties prenantes, la fermeture définitive du marché d'ivoire de Kinshasa-RDC, les enquêtes régulières (tous les deux ans) et le suivi de l'action pour mettre en œuvre les engagements pris.



1. INTRODUCTION

Hunting wild animals for their meat (bushmeat), as pets, for trophies, for subsistence and for income generation has been a common practice for local communities in Central Africa since time immemorial (Nkoke, 2012). Since hunting methods have become more sophisticated with the use of modern weapons, and access to remote areas has greatly expanded, there has been a significant increase in the number of animals being caught, leading to sharp declines in many wildlife populations (Nkoke, 2012). The direct threats to elephants in Central Africa include high levels of poaching, increasing illegal trade in their meat (Stiles, 2011) and derivative products, loss of habitat, and extractive activities. But the most significant factor has been trade in elephant ivory in both domestic and international markets. In 1979, the African Elephant Loxodona africana population was estimated to be around 1.3 million in 37 range States (Douglas-Hamilton, 1980) and by 1989, elephants numbered only some 600,000 (Douglas-Hamilton, 1989; Lemieux and Clarke, 2009). Between 1979 and 1989 more than 50% of Africa's elephants were estimated to have been poached for their ivory. Many elephant populations have not yet fully recovered from this slaughter, and most will never regain their pre-1979 population levels (African Elephant Action Plan, 2010).

The Ivory Trade Review Group's comprehensive report prior to the seventh meeting of the CITES Conference of the Parties (CoP7) in 1989 made it abundantly clear that the primary threat to elephants was the international ivory trade (Cobb, 1989). Consequently, the CITES Parties agreed a global ban on commercial ivory trade that took effect in January 1990. General compliance by the major ivory importing nations, especially Japan, led to a decline in illegal ivory trade and, without international markets, poaching fell to background levels throughout most of Africa in the 1990s. Over time, unregulated domestic ivory markets grew in certain African countries, especially Central and West Africa, and became a driver of trade (Courouble et al., 2013; Milliken et al., 2002; 2004; 2007; 2012; 2016). In the early 21st century, however, economic development in certain parts of Asia gave rise to new markets, especially the advent of China, Thailand and Viet Nam as major ivory consuming nations, which has resulted in a number of African

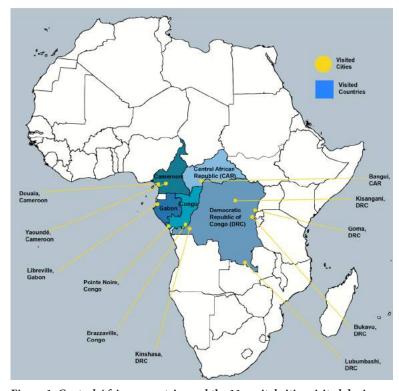


Figure 1: Central African countries and the 11 capital cities visited during the surveys



Photo 1: Worked ivory in Bikeko market, Kinshasa DRC, ©TRAFFIC / Sone Nkoke

countries seeing their elephant populations affected by serious poaching for export once again. It is estimated that tens of thousands of elephants have been killed each year just to harvest their tusks for sale on the black market (Wittemeyer et al., 2014; CITES, 2016: Thouless et al., 2016). Central African countries covered in this market survey have also been determined by a new method of isotopic source-area determination (Ziegler et al., 2016) and have been strongly implied amongst the countries of origin of elephant ivory from seizures of illegal ivory shipments in Germany (from Cameroon and DRC), Sri Lanka (DRC), Togo (DRC and other Congo Basin countries), the United Arab Emirates (Cameroon and Gabon) and the Czech Republic (DRC and other Congo Basin countries) (Ziegler, 2017). The demand for ivory has surged to a point that the tusks of a single adult elephant can be worth more than 10 times the average annual income in many African countries (Gettleman, 2012). Releasing the African Elephant Status Report for 2016 at CITES CoP16, IUCN experts warned:

Central Africa's forest elephant population has been substantially affected by poaching for ivory, since the 1990s. The Democratic Republic of Congo used to hold one of the most significant forest elephant populations in Africa, which has now been reduced to tiny remnants of its former size. Gabon and Congo now hold Africa's most important forest elephant populations but both have been affected by heavy poaching in recent years, as have the forest and savannah populations of Cameroon. The savanna populations of Chad have taken heavy losses and those in the Central African Republic have almost completely disappeared (Anon., 2016).

Gabon, Central African Republic, Congo, Democratic Republic of Congo and Cameroon are long-standing members of CITES. Various reports, both recent and in the past, indicate that these Central African countries have domestic ivory markets in their capital cities and in other locations within the country (Martin & Stiles, 2000; Milliken et al., 2002; 2004; 2007; 2012; 2016). The last major all-Africa survey of these markets was done by Esmond Martin and Daniel Stiles in 1999 (Martin & Stiles, 2000). A 13-year old assessment of 22 ivory carving markets in Africa and Asia conservatively estimated that the ivory of between 4,800 and 12,200 elephants was needed each year to support annual production needs (Hunter et al., 2004). This supply is illegal, and was probably not sustainable at the time of the



survey. Since then, with China's market greatly expanding, the killing pattern surged and has disproportionally affected elephant populations in Central Africa.

TRAFFIC has undertaken three concurrent surveys in Central Africa, one in 2007, another in 2009, and the last in 2014/2015. These efforts have primarily focused upon assessing the scale and dynamics of local ivory markets and ivory carving industries in key cities in five Central African countries (Gabon, CAR, Congo, DRC and Cameroon). Additional information on other ivory trade issues, including the collection and movement of commercial consignments of ivory to international destinations, assessments of legislation and policy, law enforcement, corruption and governance, were also collected. The cities where the studies were carried out include Douala and Yaoundé in Cameroon, Bangui in CAR, Kinshasa in DRC, Libreville in Gabon, and Pointe Noire and Brazzaville in Congo. These same cities were surveyed again in 2007, 2009, 2014/2015 studies. The 2009 survey also covered additional cities in DRC including Kisangani, Goma, Bukavu, and Lubumbashi-which had not been visited in 2007 and were not visited in 2015.



2. METHODOLOGY

The methods used in the studies of 2007, 2009, and 2014/2015 were, to a large extent, similar to those employed by Martin and Stiles in 1999 to enable the comparison of results over time. The research consisted of two major activities: field visits and meetings. The investigators—one in 2007 and 2009, and another in 2014/2015—strived to visit sites that were previously surveyed, including markets and carving workshops, to ascertain whether they were still active or not. Meetings were then organized with relevant law enforcement agencies and NGOs to collect additional information, especially on the political and regulatory context of the trade.

2.1 Market Surveys

Over time, increasing national and international pressure on traders, and frequent law enforcement operations in some of the capital cities by nongovernmental organizations (NGOs) governmental agencies, has rendered the monitoring of domestic ivory trade in Central Africa very difficult. A direct consequence of this was increased suspicion from local traders in all of the markets visited in the 2014/2015 survey. Indeed, some of the methods that were used in the initial survey of 1999 became ineffective. Vendors and carvers were reluctant to answer questions, and even some government officials when interviewed refused to give clear information such as the quantity of ivory in national stocks. This resulted in the investigators using undercover methods to obtain information in the markets and workshops in some cases. However, it should be noted that, no ivory product was ever purchased and no sale ever induced as a result of this undercover approach or any other method used during the study.

The data collected during the market surveys included the following:

- the number of outlets selling ivory products;
- the quantity of ivory on display;
- the type of ivory products and their retail prices;
- the number of carving workshops;
- the number of carvers and their nationalities;
- the source of raw ivory; and
- the price of raw ivory.

Some of the markets and other outlets displaying ivory items were visited several times in order to obtain the most accurate assessment possible of the ivory products on sale and the rate of turnover. The repeated visits also enabled a better appreciation and estimation of volumes of trade, quantities and prices. During these visits, the number of stalls were counted in tandem with the evaluation of the number, type and the quantity of ivory on sale, as well as price information, the presence of local carving workshops and the wider trade context. Recording of interviews and pictures of the stalls and items were done whenever it was convenient and this was used to double check information. In some instances, informants and local investigators were used to collect further information from vendors to avoid suspicion. This was used more so in areas where the investigator could not speak the local language (for example, in Lingala in DRC and Bamoum in Cameroon).

All ivory sighted during the surveys was classified according to the CITES Ivory and Elephant Product Seizure Data Collection Form:

- Raw ivory—refers to whole tusks which remain in a raw state or whole tusks which may derive form sport hunting or other activities, including those that are mounted or polished. In addition to whole tusks, raw ivory includes tusks that have been broken or cut into pieces, but otherwise have not been shaped or processed.
- Semi-worked ivory—refers to ivory that has been shaped or processed to some extent but which will undergo further processing at a later stage. Examples would include ivory blocks that have been fashioned into name seal blanks, but are not yet finished products.
- Worked ivory—refers to carved or manufactured ivory items that are finished products. Examples would be figurines, chopsticks, beads and bangles and other finished products.
- Fresh ivory—refers to ivory that is deemed to have been recently poached. Such ivory typically had blood or flesh attached to it, does not show evidence of discolouration or cracks from ageing, and sometimes exhibits sharp (as opposed to worn or blunt) edges on the lip cavity end of the tusk when it was removed from the animal using an axe, machete or other sharp tool.
- Old ivory—refers to ivory that is deemed to have been held in storage for a considerable

amount of time, typically exhibiting a weathered appearance with discolouration, cracks and brittleness as noticeable features. This includes antique pieces although care must be taken as during this study a number of carved pieces were encountered which had been stained to make them appear as antiques, presumably to add value.

2.2 Workshop Surveys

Although some of the carving workshops were already known from previous surveys, new ones were identified based on information collected during market or shop surveys. Some had closed down for different reasons including harassment from authorities, difficulties getting raw ivory, change in business, etc.

2.3 Meetings

Once the field investigation was completed, the investigators proceeded with a series of meetings with, firstly, officials of the relevant ministries or governmental agencies and, secondly, with local or international NGOs present in the respective countries or other resource persons involved in conservation issues.

The meetings with the government authorities in the respective countries were held to get information on the relevant policies and legislative frameworks governing wildlife trade, the status of ivory trade and national ivory stockpile management. The information obtained was analysed and compared with the observations made during the market surveys to draw the most plausible conclusions. When access was not denied, national ivory stockpiles at the various locations were also visited. On some occasions, the researchers were able to consult the ivory register book and compare the entries with information collected concerning the details of important known ivory seizures. Local and international NGOs, experts and other contact persons of relevance to the study were also consulted. Their views were useful to corroborate and further understand the results of the field surveys and the information received from government sources. These interactions provided additional information to enrich the report. Other professional investigators were consulted to tap from their knowledge on

"The methods used in the studies of 2007, 2009, and 2014/2015 were similar to those employed by Martin and Stiles in 1999 to enable the comparison of results over time."

general ivory trade issues. Annex 1 gives details on the persons met in the different countries and their respective roles and organizational affiliations.

2.4 Prices

The prices of items in the markets surveyed were originally given in local currency—the Central African francs (Francs CFA in French) in Gabon, Cameroon, CAR and Congo, and Congolese francs (FC) in DRC—but sometimes prices were given in US dollars (USD). In any event, all price data have been converted to USD rates for easy appreciation by readers outside of the Central African region. The exchange rates used by the author are as follows:

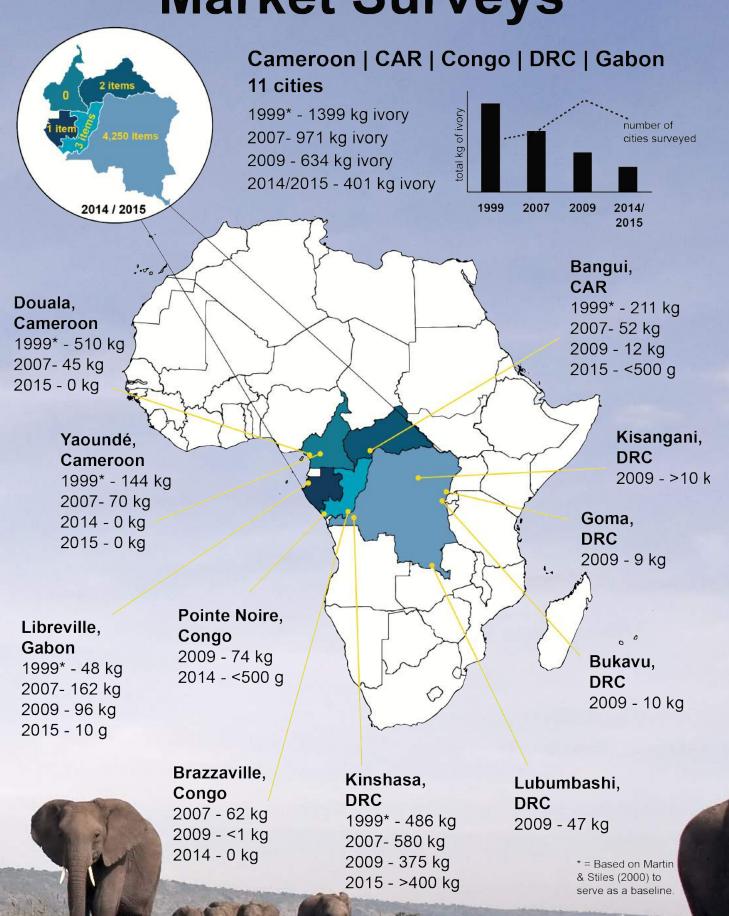
- Francs CFA have a fixed exchange rate to the Euro: FCFA100 francs = Euro.152449.
- USD1 = FCFA500 (Gabon) in 2007, 2009 and
- USD1 = FCFA480 (CAR and Congo) in 2007 and 2009;
- USD1 = FCFA479 (Cameroon) in 2007;
- USD1 = FCFA500 in 2014/2015 in Cameroon, CAR and Republic of Congo; and
- USD1 = FCF1,000 in 2015 in DRC (prices in 2007 and 2009 were given in dollars and hence no conversion rate here for those years)

It should be noted that prices often vary not only according to the weight of the item, but also because of the quality of the carving, as well as the negotiation power of the buyer or vendor. The price of a similar piece in the same location can also differ greatly from one vendor to another, and whether the client is a tourist or a trader. The price data are therefore indicative and should be interpreted with some caution.

During the 2015 survey in Kinshasa, a local investigator was used to augment the work of the principal TRAFFIC investigator, who could speak French but not Lingala, the local African language.



Central Africa Ivory Market Surveys



3. RESULTS



3.1 Gabon

Gabon, which represents 12% of Africa's tropical forest, is the major elephant range State in the subregion. The estimated number of elephants in areas in Gabon that have been surveyed over the last ten years is 7,058 (\pm 2,303), but 80% of the country has not been assessed and it is speculated that an additional 59,057 to 67,094 elephants may be found there (Thouless et al., 2016). The Minkébé National Park in the north of the country shelters a large, if not the largest, elephant population in the region, but poaching is quite rife (Luc Mathot - Coordinator of Conservation Justice, Gabon, personal communication, March 2015). All the ivory market surveys in Gabon were carried out exclusively in Libreville, the capital city, from 9 to 15 April 2007 and from 24 to 29 April 2009, and then again from 17 to 22 March 2015.

Legislation and Policy

In Gabon, wildlife in general is protected under Law No. 16/2001 of 31 December 2001 of the Forest Code, however, the current Forest Code is under revision to rectify weaknesses and other gaps identified over the years. Article 92 of the Forest Code stipulates that hunting, capture, detention, transportation and commercialization are prohibited (with a limited exception for scientific purposes), with prison terms ranging between three to six months and fines of FCFA100,000 to FCFA10,000,000 (USD200 to USD20,000 at USD1=500FCFA). Elephants are totally protected under Decree No. 0164/PR/MEF of 19 January 2011. Gabon is also a signatory of international conventions, including CITES, which was ratified on 30 May 1988.

Law enforcement related to wildlife crime is under the auspices of an anti-poaching unit called *Brigade* de lutte contre le braconnage which was created in October 2001 and is based in Libreville. Other law enforcement actions include a temporary collaboration in 2008 among SETRAG (Sociéte d'Exploitation du Transgabonais — Trans Gabon Railway), the Department of Wildlife and Hunting, and the World Wide Fund for Nature (WWF), which consisted of controlling wildlife trade on the trains from eastern Gabon arriving at Owendo station in Libreville.

A special unit known as *l'Agence Nationale des Parcs Nationaux* (ANPN) was established on 27 August 2007 to facilitate the implementation of Law No. 003/2007 on the management of national parks. Law enforcement in Gabon is also supported by NGOs such as WWF and Conservation Justice (CJ) mostly through advice and technical support.

Government-held Ivory Stockpiles

In Gabon, access to government-held ivory stockpiles in Libreville was refused during the 2007 and 2009 surveys. The reason given by the administration in both cases was that the request was not made long enough in advance. The last official records of ivory stockpiles in Libreville indicated:

- 442.2 kg of worked ivory seized on 20 July 1999 and 1609.35 kg of raw ivory in 2004; and
- 442.2 kg of worked ivory and 2,209 kg of raw ivory on 26 March 2008 indicating that the stockpile grew by just under 600 kg from 2004.

It is not clear from the figures given above why the volume of worked ivory in 2004 is the same as for 2008 since, according to Anne Marie Ndongobiang of the Wildlife Conservation Society (WCS), there were regular seizures and storage of worked ivory from the city markets over the period 2004–2008. This is most likely an error or possibly an indication of corruption, with no official auditing having been done during this period. Later, Ringuet (2012) led on a joint audit between the Government of Gabon, TRAFFIC and WWF.

Apart from the government-held stockpiles in Libreville, informed sources indicated that ivory was stored in various locations all over the country and periodically translocated to the national stockpile. At the time of the 2009 survey, the *Brigade de faune* (the wildlife brigade) in Minkébé had 87 kg of ivory that had to be transported to Libreville. There is no agreed

national procedure or security protocol for the transport of seized ivory from the provinces to Libreville and the risk of ivory being stolen during transit is potentially high.

During the 2015 survey, Meye Brice Leandre of MFEPRN said there were seven tusks and 104 ivory pieces in the national stockpile in Libreville and about 1,000 kg of ivory was held in all of the other provinces; these stocks were what remained after the burning of Gabon's national ivory stock of some 4.8 tonnes in June 2012. He pointed out that ivory seizures and stockpiling continues with the combined efforts of the government, CJ, WWF and other specialized structures such as ANPN. Further, Gabon is constructing a new central storage facility with a laboratory for DNA analysis to facilitate traceability of seized ivory in the premises of ANPN in Libreville to ensure increased security for the national ivory stockpile.

3.1.1 Libreville

Retail Outlets and Prices for Worked Ivory

An eight-day ivory market survey in June 1999 identified a total of 462 ivory items, weighing 48 kg, for sale in eight retail outlets in Libreville (Martin & Stiles, 2000). These results represented a major contraction of Libreville's ivory market since June 1989, when some 60 retail outlets were found selling an estimated 740 kg of ivory products (Allaway, 1989a). Regardless, during the 2007 survey, it was possible to observe ivory trade on visits to the markets without causing suspicion as the investigator was perceived as a new customer.

International Airport, Hotels and Shops

No ivory items were found in the airport or in the Meridien Hotel shops in spring 2007 and again in 2009 and 2015. Ivory items were seen in other shops in 2007 and 2009, but nothing was observed in 2015. Table 1 shows ivory items seen in different shops in Libreville in 2007 and 2009.

Markets

Libreville has three major curio markets: The Marché caché de l'artisanat, Petit marché artisanal, and Grand village des *Artisans*. Ivory items on display in these markets over the years are summarized in Table 2.

A majority of the shops selling ivory products were owned/ managed by Senegalese and a few Cameroon traders. In most cases, prices given for items were intuitive and not correlated to weight/size as the vendors had no knowledge of the exact weight/size of their items. Table 3 shows the range of retail prices of items in Libreville in 2007.



"Gabon, which represents 12% of the Africa's tropical forest, is the major elephant range State in the sub-region."

Year	Shop / Location	Ivory Items Displayed	Number / Quantity	Average Price (USD)
2007	Laico Palace	Combs, olive picks, chopsticks	15	-
	Mbolo shopping centre	Small pieces (rings, bracelets)	0.5 kg	-
	3 Jewellery shops (city centre)	Pendants, elephant hair bracelets	13	-
2009	Laico Palace	Comb, paper knife	2	50
	Chopard & Ciribelli	Cathedral dome (40 cm, 2.5 kg)	1	4,000
	Bijouterie Gabonaise	Bracelets (about 600 g in total)	21	30

Table 1: Names of shops and type of ivory sold in Libreville, Gabon in 2007 and 2009

Market	Year	Total Number of Stalls	Number of Stalls Selling Ivory	Type of Ivory Item	Number of Items	Total Estimated Weight
Marché ca-ché de l'artisanat	2007	16	3	Olive picks, combs	4	Less than 1 kg
	2009	16	1	Bracelets, rings	6	75 g
	2015	14	0	0	0	0
Petit marché artisanal	2007	21	1	Bracelet	1	0
	2009	21	1	Bases of olive picks	3	About 550 g
	2015	21	0	0	0	0
Grand village des Artisans	2007	52	13	Carved tusks, animals, women's busts, clippers, knives	475	152 kg
	2009	52	17	0	595	91 kg
	2015	52	0	0	0	0

Table 2: Type, number and quantity of ivory items sold in the different markets over the years, Libreville, Gabon

Item	Size / Description	Starting price in USD	Final price in USD
Animal	10 cm		20
	20 cm		30
	30 cm		60
Human bust	2 kg	1000	500
Carved tusks	2.5 kg (pair)	500	280
	1,2 kg		160
Sailing clippers	500 g		120

Table 3: Range of retail prices of ivory items in Libreville, Gabon, 2007

USD1 = CFA500 in 2007

Item	Size / Description	Starting price in USD	Final price in USD	
Necklace	180 g	50		
Bracelet	<1 cm width	30	20	
	3 cm width	40	30	
Ring	5 g		4	
Name seal	Large, 100 g	60	50	
	Medium, 60 g Small, 40 g	40	30 24	
Animal figurine	10 - 20 cm, 200 - 400 g	70-140	60	
	20 – 30 cm, 500 g	140	80	
	>30 cm, 800 g	180	100	
Buddha statue	18 cm, 500 g	180		
Figurine	35 cm, 800 g	400	260-360	
Human bust	20 cm, 1.5 – 2.5 kg	1600	600-800	
	5 kg	2400	2200	
Carved lampshades	15 cm x 20 cm, 500 g	600	500	
	40 cm, 900 g 25 cm, 400 g	1000 350	600 200	
	- 111	330		
Comb	10 – 18 cm, 100 g		60	
Polished tusks	60 cm, 5 kg (pair)	700	400	
Carved tusks	40 cm, 1.2 kg	400	240	
	50 cm, 3.5 kg (carved)	1400	800	
	65 cm, 5 kg	1600	1200	
Hairpin	8 cm, 80 g	10	4	
Old sailing clippers	40 cm, >1 kg	600	500	
Chopsticks	25 cm (pair)	16	15	
Paper knife	20 cm		50	
Olive pick pot	15 cm, 120 g	30 - 50	20 - 30	

Table 4: Range of retail prices of ivory items in Libreville, Gabon, 2009

The Investigator counted about 96 kg of ivory, 626 items in 24 outlets during his stay in Libreville in 2009. USD1 = FCFA500.

In the 2009 survey, more ivory items were sighted as compared to 2007. Some of the items were said to have come from Botswana and/or Zambia. Table 4 depicts the items and prices recorded in 2009.

As for the nationality of the buyers, most of the ivory customers in 2007 were likely Chinese, French, Italians, Lebanese, Russians or Spaniards with no significant differences between them in terms of frequency of presence in the marketplace and the quantities of ivory purchased. During the 2009 visit, a local Chinese girl was seen guiding a group of Chinese tourists through the market and assisting with translation. According to the vendors, the local Chinese girl was a regular customer buying to resell to her fellow citizens visiting Libreville (workers from infrastructure projects, and from shipping companies).

In the 2015 survey, no ivory items were displayed in any of the three markets studied. However, discussions with a Senegalese vendor resulted in him offering a ring at USD20. Requests to view other products were refused mainly out of fear and mistrust. He was affirmative that he could supply more products if he was sure of the buyer. The researcher gathered that in addition to Senegalese and Cameroonians identified in previous surveys, Malians and Guineans were also involved in the ivory trade. The main buyers in 2015 were said to be of Chinese origin and a few Europeans, especially French. This information on main buyers in 2015 was confirmed by Rosny Ngalekassanga and an investigator working with Conservation Justice

(CJ) who had carried out frequent undercover investigations on wildlife trade in Libreville.

Workshops and Ivory Carving in Libreville

The number of workshops visited in 2007, 2009 and 2015 are presented in Table 5. These workshops belonged mainly to foreigners, especially Guineans. There are also individual carvers but they work from home. According to Luc Mathot, Coordinator of the NGO Conservation Justice in Gabon, the sculpted ivory market is quite small compared to the raw ivory market and this is mainly because worked ivory pieces in Asia are more aesthetic and of better quality hence the preference of Asian buyers for raw than worked ivory items.

Source and Prices for Raw Ivory

According to government wildlife officials, northern Gabon was an important source of poached ivory in 2007. The majority of elephant tusks in the Libreville market came mostly from the north of Gabon and the main poachers operating there were said to be Cameroonians coming over from the Djoum area in southern Cameroon. The poachers would cross the borders in the company of Baka (indigenous people living in the southeastern rainforests of Cameroon, northern Republic of Congo, northern Gabon, and southwestern Central African Republic with a very good knowledge of the forest ecosystems and wildlife) and enter Minkebe National Park. Most of the poached ivory in the region goes to nearby

Name / Workshop Location Market	Year	Number of Craftsmen	Likely Nationality of Craftsmen	Ivory Item	Quantity	Price (USD)
Glass Quarter, Next	2007	3	Guinea, Cameroon, DRC	50-60 cm, 2.5-3 kg carved pieces	2	-
to Pharmacie Glass	2009	5	Guinea, Cameroon, DRC	0	0	-
Glass	2015	3	Guinea, Cameroon, DRC	0	0	-
The Air	2007	4	Congo, Gabon, Guinea	45 cm tusk	1	-
Liquide Office	2009	6	Guinea	0	0	-
	2015	2	Guinea, Cameroon, DRC, Senegal	0	0	-
Ali Sculptor,	2009	2	Guinea	15 cm, 150 g Buddhas	5	52
Saint Germain	2015	3	Guinea	0	0	-

Table 5: Workshops in Libreville, Gabon, craftsmen, items and comments

Cameroon by road and just a small quantity finds its way to distant Libreville. Djoum in Cameroon was reportedly a crucial crossroad for ivory coming from the south (i.e. from Gabon) and from the east. The difficult access to this region because of the lack of roads, or their very poor condition, deters frequent law enforcement action.

In 2009, northern Gabon was still the main source of raw ivory in Libreville but, as was the case in 2007, most of the ivory left the region for Cameroon and only a small quantity effectively reached Libreville. This region, especially the Minvoul and Oyem areas, was again confirmed by one wildlife Investigator (INV3LG) and Luc Mathot of CJ as the main source of ivory in Gabon during the 2015 study. In addition to Cameroon, Togo was cited as another major transit point for ivory from Gabon. In fact, some 60% of the 3,815 kg of ivory seized in Lome in 2014 prior to export to Viet Nam apparently came from Gabon, according to DNA testing of seized ivory samples (Wasser *et al.*, 2015).

The second route for raw ivory identified in 2007 was from eastern Gabon, mainly by the train to Owendo station in Libreville. The *Sociéte d'Exploitation du Transgabonais*— Trans Gabon Railway (SETRAG)—project implemented in 2008, aimed at increasing law enforcement oversight on that route and eradicating the transportation of illegal wildlife products via the trains. Practically, this was done through sensitization, training, the control of luggage and parcels of all travelers by train (both passengers and workers), and follow up of litigations in SETRAG and the Ministry in charge of wildlife.

That the eastern part of Gabon is another source of ivory for Libreville was also corroborated by another investigator in 2015, who believed that it was coming from the border region with Congo and suspected some ivory may also be entering Congo and then going on to Cameroon. In the 2014 survey in Brazzaville, a PALF investigator also mentioned Likuala in the northern part of Congo and the Lakoumou region near the Gabonese border as a source of raw ivory for both Gabon and Congo.

The large tusks, according to claims by a carver interviewed in Libreville in 2007, came mainly from DRC. Reliable sources indicated that there were efficient networks in Libreville through which raw ivory tusks were immediately dispatched to regular customers and commissioners. Figure 2 shows the major sources and movement of raw ivory in Gabon and Figure 3 shows the change of average prices for raw ivory recorded during the different survey periods.

"There were efficient networks in Libreville through which raw ivory tusks were immediately dispatched to regular customers and commissioners."



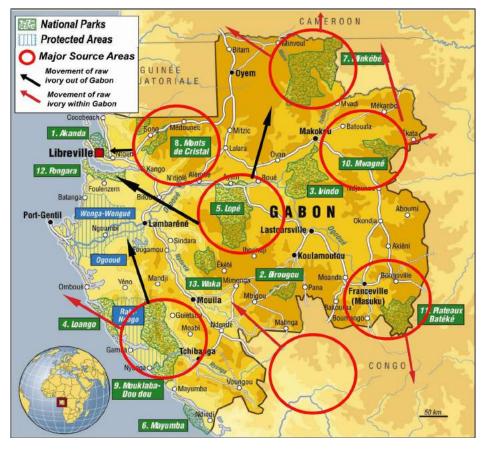


Figure 2: Major sources and movement of raw ivory in Gabon Source of map - http://www.mappery.com/maps/Gabon-National-Park-Map.jpg

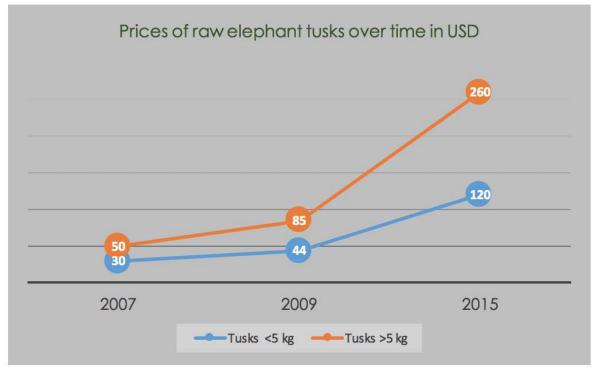


Figure 3: Increase in ivory prices over the years in Libreville, Gabon



3.2 Republic of Congo (Congo)

Congo probably still holds the second largest elephant population in Central Africa, although they are increasingly threatened by poaching and human encroachment. For areas surveyed within the last ten years, the population estimate is 6,057 (±1,222) but unsurveyed areas potentially hold between 20,924 to 26,942 more elephants (Thouless *et al.*, 2016). Most elephants are found in the northern and eastern parts of the country bordering the Central African Republic (CAR), Cameroon and Gabon, especially Odzala Kokoua and Noubale Ndoki National Parks and surrounding buffer zone areas.

Although a comprehensive ivory trade survey was carried out in the sub-region in 1999, Congo was not surveyed because of civil unrest (Martin & Stiles, 2000). Therefore, the investigator in 2007 had no background documentation on which to base initial research and assessment, which was conducted from 3 to 7 May 2009. Additional surveys were carried out in 2009 in Pointe Noire from 30 March to 1 April, and in Brazzaville from 2 to 6 April. In 2014, another survey was done from 8 to 12 October in Brazzaville and from 13 to 15 October in Pointe Noire.

As in other cities surveyed in the region, researchers had to cope with suspicion among market vendors and new tactics had to be developed every day to convince reluctant traders, workshop owners and vendors to divulge information. Domestic ivory trade in Brazzaville was influenced by the then-unregulated ivory market in nearby Kinshasa. However, domestic trade in Brazzaville is far less active and much more discrete than on the opposite shore of the Congo River, mainly because of enforcement actions. In the 2014 survey, additional places were surveyed as a result of new information; these included hotels, private collection points and shops, markets and carving workshops.

Legislation and Policy

Congo banned domestic ivory trade in 1991 under Act 114/91 of 24 June 1991 issued by the *Conférence Nationale Souveraine* (CNS). This Act forbids elephant killing in the Republic of Congo, while *Arrêté* 32/82 of 18 November 1991 protects elephants. Wildlife law enforcement is carried out by the wildlife department of the Ministry of Forest Economy and Sustainable Development (MEFDD).

Congo joined CITES in 1983 after ratification of Law No. 34-1982 of 7 July 1982. Today, national legislation governing wildlife protection and trade is rather comprehensive and attendant penalties for violations generally serve as a deterrent with maximum sentences of five years imprisonment and fines of FCFA100,000 to FCFA5,000,000 (USD200 to USD10,000 at USD1 = FCFA500); these penalties constitute some of the highest in Central Africa. Other relevant wildlife legislation includes:

- Law No. 37-2008 of 28 November 2008 on wildlife and protected areas;
- Arrêté No. 6075 of 9 April 2011 determining totally and partially protected wildlife species;
- Law No. 1-1963 of 13 January 1963 on penal procedure code;
- *Arrêté* No. 3507 of 10 November 1993 on suspending the sale of ammunitions and arms used in war; and
- Law No. 34-2012 of 31 October 2012 creating the Congolese Agency of Wildlife and Protected Areas (ACFAP).

A number of arrests have occurred in Congo with the profile of suspects being quite varied, including local wealthy business people, diplomats, military officials, and foreign nationals from Cameroon, China, Egypt and Senegal. Some of these arrests were carried out at Maya Maya Airport and involve Ethiopian Airlines being used as a common means to transport ivory out of the country. Another common transport route involves the use of boats and ferries to move ivory via the Congo River. One of the major anti-trafficking results in recent years concerned the arrest and sentencing of a Chinese trafficker to four years in prison in 2011. The Chinese national was arrested attempting to smuggle five large elephant tusks, 80 ivory chopsticks, traditional name seals used in Asia, three ivory carvings and many other small ivory items to China. The involvement of Chinese nationals in the illegal ivory trade has been described as one of the strongest factors affecting the rise in this criminal activity in Congo, according to Naftali Honig, the Coordinator of the wildlife law enforcement project - *Projet d'Appui à l'Application de la loi sur la Faune Sauvage* (PALF) in 2014.

Government-held Ivory Stockpiles

During the 2007 survey in Congo, 1,083 kg of marked ivory was stored in Brazzaville with the Ministry in charge of wildlife, as well as the 392 kg held at the Trésor Public (Public Treasury) in Brazzaville, and these stockpiles were assessed by TRAFFIC's investigator. Another stock of 600 kg of ivory was reportedly in the Sangha area of northern Congo. Unfortunately, during the 2009 survey, none of this stockpile could be assessed because the appropriate officials were not in the country. The last government-held stockpile count, which was done in June 2008 and reported to CITES, estimated the total ivory stock at about 3,000 kg, with 1,401 kg (552 tusks and a 33 kg bag of worked ivory) in Brazzaville, 1,300 kg in Ouesso, and 300 kg in Nouabalé Ndoki National Park. At the end of 2008, the total stockpiles in Congo likely exceeded 3,000 kg.

During the 2014 survey, access to the stockpile in the Ministry in charge of wildlife was refused under the pretext that work was ongoing to centralize all ivory stockpiles in the country. However, Roger Mbete, the Director of Wildlife and Protected Areas, estimated the national stock at about 5,000 kg, most of which was still to be collected from the provinces so that it could be stored in a national storage facility in Brazzaville.

Following a national inventory, Congo publicly burnt 4,700 kg¹ of ivory at a side event of the International

Conference on Illegal Trade in Wild Fauna and Flora in Africa, hosted by the country in April 2015.

3.2.1 Brazzaville

Retail Outlets and Prices for Worked Ivory

Martin & Stiles (2000) were unable to conduct any market surveys in Brazzaville in 1999 owing to poor security at the time. As a result, TRAFFIC's work commencing in 2007 offers the first quantified look at the ivory market in Congo's capital city.

International Airport and Hotels

No ivory was found in any of the shops at Maya Maya International Airport in 2007, 2009 or 2014. However, some shops in the city were selling ivory items in 2007 as indicated in Table 6, but no ivory items were sighted in these shops during the 2009 and 2014 surveys.

Private Shops

The greatest number of ivory items found on sale in Brazzaville in 2007 were in a private house situated in the Ouenzé quarter, *arrondissement* 5. The courtyard of the house was used as an ivory workshop and the carved items were displayed in a separate room. 280 ivory items were recorded with a total estimated weight of 48 kg. Amongst this ivory were 31 pieces of statues or busts that were 30 cm or more in height. This same shop was visited in October 2014 but there were no longer any ivory products on display. From information gathered at that time, the clandestine business had moved across the river to Kinshasa, DRC to avoid enforcement action.

Some other private shops were visited in the October 2014 study based on information from PALF's investigator, INV7B, who also collaborates

Shop / Location	Year	Ivory Items Displayed	Number / Quantity	Average Price (USD)
Olympic Hotel Shop	2007	Polished tusk (2.6 cm; 2.5 kg)	2	416
Le Méridien Hotel Shop	2007	Female bust (22 cm; 1.5 kg)	1	250
		Statues (30 cm; 1 kg)	2	938 for both

Table 6: Ivory items in shops, Brazzaville, Congo, 2007

¹ http://voices.nationalgeographic.com/2015/04/29/congo-ivory-burn-could-be-turning-point-in-fight-against-wild-life-trafficking/

"TRAFFIC's work commencing in 2007 offers the first quantified look at the ivory market in Congo's capital city."

with MEFDD on investigations. Although these shops are known to be involved in ivory trade, only wood carvings and fabrics were sighted during the visit in 2014. However, after discussions with some of the vendors, and upon the realization that the investigator was a foreigner, two of them, one in the Poto Poto neighbourhood and another in the Bifuiti neighbourhood, indicated that they were capable of suppling ivory products. They also indicated that it takes some time to acquire the products before they can supply. This suggests that an underground ivory trade still exists under the cover of other business, such as those selling carved wooden items. It was also alleged that a Chinese shop was trading in ivory under the cover of a general commercial shop dealing in electronic devices, bags, cloth and other such products. The survey of the shop revealed many other rooms behind the shop, but access to them was refused.

Markets

There is only one large market in Brazzaville dealing in ivory and other artefacts: the *Marché du Plateau*. It is a market full of handicraft items with more than 60 stalls selling a variety of curios, including wood carvings, rafia textiles and stone sculptures. Only three stalls were selling ivory items in 2007. Many of these artefacts reportedly came from Kinshasa. Table 7 shows the range of retail prices of ivory items in *Marché du Plateau* in Brazzaville in 2007.

Most of the vendors were Senegalese who complained of increasing regulation by agents of the Wildlife Department and also indicated that the ivory trade was on the decline. Some statues with Asiatic features that were sighted were said to have been ordered by a Chinese customer.

In 2009, the *Marché le Plateau* again had three stalls with ivory, but only about 10 items were on display with a total estimated weight of 0.4 kg. One stall had 0.15 kg of ivory in total, including olive picks, a small stand for USD31 (first price) and USD25 (final price), a few rings and a small 6 cm elephant.

The Marché le Plateau was visited again in the 2014 survey but, unlike previous surveys, not a single ivory item was on display. After discrete discussions with some 32 vendors, only three were willing to give information on ivory. One female vendor indicated that the reason for their reluctance to speak about ivory is because there are frequent patrols from officials of MEFDD, law enforcement and some NGOs, and that many people were posing as buyers just to get information and report them to the authorities. She, however, indicated that ivory items were very difficult to find and that it was easier to obtain them in Kinshasa. The other two vendors, one from Senegal and one from Cameroon, with shops adjacent to one another informed the TRAFFIC investigator that if he was serious he could be supplied ivory items but only after he had placed an order and had paid a percentage of the total amount upfront with the balance due upon delivery. Whilst in the market, six Chinese nationals were observed discussing with a Senegalese vendor and gesticulating around some carved artifacts made of wood and clay, including vases, animals and stools. It is sometimes the case that small ivory carvings are hidden in such artwork to elude detection.

Item (N° of Items)	Size / Description	Starting price in USD	Final price in USD
Rings (70)	5 g		4
Bases of olive picks (2)	100 g		26
Statues with Asiatic	22-23 cm, 700 g		125
features (2)	28 cm, 1 kg	625	350

Table 7: Range of retail prices of ivory items in artefact market, Brazzaville, Congo in 2007 USD1 = FCFA480 in 2007

Other Businesses

In tandem with the market surveys in 2007, investigations and discussions were held with other businessmen and individuals to get a wider picture of the ivory trade in the country. One of the persons investigated was a wildlife trader, whom the investigator had met before. He said he was collaborating with agents in the Ministry of Waters and Forest who could provide raw ivory if the price was right. This encounter suggests that the problem of corruption in government circles and the leakage of ivory from national stockpiles remains a problematic issue.

During the 2009 survey, a mobile vendor was found selling ivory items. He had three large ivory combs (25 cm) for USD188 (first price), then USD73 (last price), ivory hair pins (0.3 kg in total) and necklaces made of bone on offer. He added that he also had a 40 cm ivory statue as well as an ebony and ivory stand at home.

Workshops and Ivory Carving

During the 2007 survey in Brazzaville, the investigator visited four ivory workshops. The biggest one was located in the Ouenzé quarter belonging to a Congolese man who, according to the informant accompanying the researcher during his visit, had been carving and trading ivory products for many years. The owner indicated that although he had local Congolese customers, West Africans, Chinese and Westerners were his best clients. Some of the items observed in these carving workshops are indicated in Table 8.

Most of the workshops visited in the 2014 survey were closed either because of enforcement actions, a lack of raw tusks for carving, or a lack of work. Those not closed were now involved mainly in wood carving. Davana, an ivory vendor with whom the investigator met in 2014, was very bitter about the poor turnover of the business, complaining that the Chinese have taken over the entire ivory business. He indicated that in the "good old days" he could earn about USD833 per month as compared to a paltry USD167 or even less) that he was currently earning. This allegation supported information from Naftali Honig of PALF, whose investigations revealed the heavy involvement of Chinese in the carving of elephant ivory in the country. It is alleged the Chinese

"He indicated that in the 'good old days' he could earn about USD833 per month as compared to a paltry USD167, or even less, that he was currently earning."



"This vertical integration of ivory trade is apparently more lucrative with less risk and is being adopted more as the modus operandi of expatriate traffickers."

are engaged in the processing of raw ivory and transporting the worked items in small quantities out of the country as opposed to the exportation of large quantities of mostly raw tusks that was common practice in the past. This vertical integration of ivory trade, with the same actors or networks operating from source, through transformation/carving, to export abroad, including transportation and marketing, is apparently more lucrative with less risk and is being adopted more as the *modus operandi* of expatriate traffickers. This development warrants more thorough investigation, but according to Roger Mbete of MEFDD, the Chinese are amongst the most active—albeit invisible—actors of the ivory trade, and are rarely arrested.

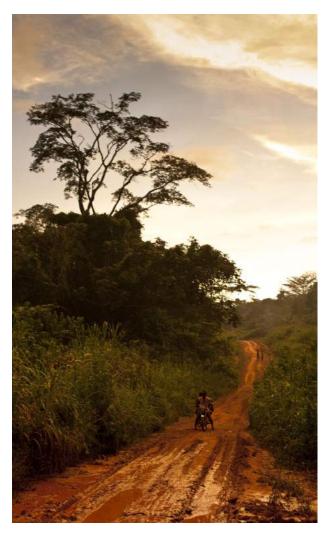
Source and Prices for Raw Ivory

The main sources of raw ivory coming to Brazzaville were in the northern and eastern parts of Congo, via the towns of Ouesso, Impfondo and Pokola, with ivory mostly transferred by boat on the Congo river. Odzala-Kokoua and Nouabele Ndoki National Parks are among the reported sources in northern Congo. The Congo river also used to transport ivory from DRC and from CAR, via the Oubangui river.

During the 2014 survey, the Odzala-Kokoua National Park and Likuala area in the northern part of Congo and Lakoumou region near the Gabonese border were mentioned as the major sources of raw ivory. According to Mr. Mbete, persons involved in artisanal mining, especially for gold, are also suppliers of elephant tusks. Cameroon was again singled out

as the major destination of raw ivory from Congo in discussions with vendors and informants, as well as investigators of PALF. A considerable amount of ivory is said to be taken to Cameroon, especially from the northern part of Congo, mainly by Cameroonians because of the higher prices obtained in that country. Other destinations for ivory include Chad, Sudan, Senegal, Benin and Nigeria.

The average price of raw ivory in Brazzaville is presented in Figure 4, showing an annual increase of 22–40% (<5kg->5kg) over the period 2007 to 2009 and an astronomical annual increase of 104–86% (<5kg->5kg) between 2009 and 2014 as shown in Figure 4. In other words, local prices almost doubled every year since 2009, coinciding with the period when Chinese demand for ivory peaked in 2011 (according to ETIS) and then staying high thereafter. It can thus be deciphered that China cornered the ivory market and local carvers could no longer compete; trade in raw elephant tusks became a direct export market.



Name / Workshop Location Market	Year	Number of Craftsmen	Likely Nationality of Craftsmen	Ivory Item	Quantity	Price (USD)			
Mochi Workshop,	2007	8	Congo, DRC,	Carved tusks (5 kg)	2	729			
Ouenzé			Guinea, Cameroon	Ring	1	-			
				Necklace	1	-			
				Human bust (1.8 kg, 25 cm)	1	521			
				Bracelets (2.5 cm large)	>20	52			
				Round and flat tiles for a Chinese game	32	10			
				Chess set with black & whites pieces in ivory (45x45 cm)	1	1,250			
				An elephant caravan	6 pieces	146			
	2009	2	Congo	0	0	0			
	2014	No longer in 6	No longer in existance						
Arrondissement 4, Poto Poto	2007	4	Congo, Guinea	Human bust (4 kg, 15 cm diameter and 25 cm height	1	-			
	2009	No longer in 6	No longer in existance - owner said to have died						
	2014	No longer in 6	existance						
Arrondissement 5	2007	2	Congo, DRC	Woman bust	1	52			
				A bundle of chopsticks		167			
				Raw tusks	6	-			
	2009	2	Congo	Beads; necklaces		-			
	2014	3	Congo	Wood items					
Opposite	2007	3	Congo, DRC	20 cm lion	1	104			
Arrondissement				Necklace - big beads (0.27 kg)	1	52			
5, - Ouenzé				Combs (15 cm)	0	10			
				Olive picks	set of 12	21			
	2009	2	Congo	Wood items					
	2014	2	Congo	Wood items					
Davana, Bifuiti	2014		Congo, Cameroon	0	0	0			

Table 8: Ivory items in major carving workshops in Brazzaville, Congo

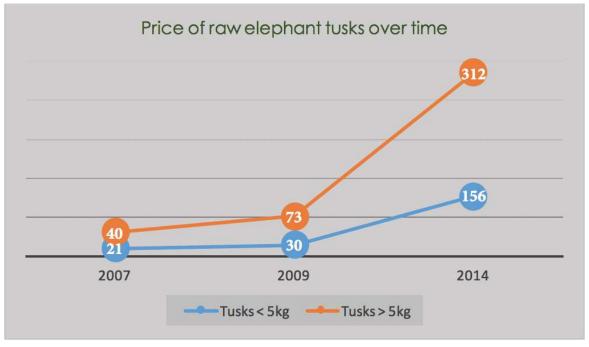


Figure 4: Increase in ivory prices over the years in Brazzaville, Congo

3.2.2 Pointe Noire

Retail Outlets and Prices for Worked Ivory

The city of Pointe Noire was not included in the 2007 survey, but was surveyed in 2009 and 2014.

International Airport and Hotels

No ivory products were observed at the Pointe Noire airport in either of the 2009 and 2014 surveys, and at local hotels only small numbers of ivory items were seen in 2009, but nothing in 2014, see Table 9.

Shops

The main ivory shop in Pointe Noire, Gilles Ivoire, which had been identified during the 1999 trade study (Martin & Stiles, 2000), had closed down after seizure of all its ivory items in 2007. Two other shops were visited in 2009: Le coin des artistes had only paintings on display, and the Culture des arts displayed mainly textiles. However, a shopkeeper exhibited two small ivory busts of females: one 15 cm and 0.4 kg and the other 20 cm and 0.35 kg for USD125 and USD146, respectively. These shops were visited again in 2014, but had no ivory items on display. On the other hand, two polished tusks of about 40 cm long and weighing about 1.5 kg were found in a lawyer's office in 2014. According to the administrative assistant, the tusks had been there for more than five years and were not for sale. The tusks were put there for decoration and reasons of prestige and power.

Markets

Pointe Noire has three major curio markets: Marché artisanal de Gaulle (later named Marché de Plateau). Village des voiliers and Grand Marché. Ivory items on display in these markets over the years are summarized in Table 10.

The only shop selling ivory items in 2014 belonged to a Cameroonian named Didier who has curio shops in Yaoundé, Cameroon, Pointe Noire, Congo and Cotonou, Benin. Upon discussions about the ivory business in general, Didier reported: "Ivory is like a drug and you have to be careful with it. If you are serious and desire it, you can get all you want, but you have to be patient and act very carefully. We can deliver products to customers even in hotels but only after studying them properly because even European customers (whites) can get you arrested. There is no problem dealing with the Chinese."

Village des voiliers, which was functioning in 2009, no longer existed during the 2014 study. It was destroyed as a result of extension work being carried out at the sea port. Table 11 gives some indication of retail prices for various ivory items in Pointe Noire in October 2014, and Table 12 gives the range of prices in March 2009.

Hotel	Year	Ivory Items	Quantity	Comments
Novotel Hotel	2009	None	0	Senegalese vendors had ivory in front of the hotel
Novotel Hotel	2014	None	0	Schegalese vehicles had every in front of the note.
Victory Palace Hotel	2009	None	0	
	2014	None	0	
Mejitel Hotel	2009	Rings, bracelets	18	Said to be for decorations but could be sold; 2.8 kg in total.
	2014	None	0	Ivory products moved because of harassment from Gendarmes
Twiga Hotel	2009	None	0	
	2014	None	0	
Azur Hotel	2009	None	0	
	2014	None	0	
Villa Madiba Hotel	2009	Polished tusks	2	110 cm, 25 kg each
	2014	None	0	

Table 9: Hotels visited and ivory items in Pointe Noire, 2009 and 2014

Market	Year	Total Number of Stalls	Number of Stalls Selling Ivory	Type of Ivory Item	Number of Ivory Items	Total Estimated Weight
Marché artisanal de Gaulle /	2009	15	5	Statues, combs, bracelets, name seals, etc.	192	41.9 kg
Marché de Plateau	2014	21	1	Necklaces, chess pieces	3	~1 kg
Village des	2009	20	4	Statues, necklaces	25	1.8 kg
voiliers	2014	No longer in	existance			
Grand Marché	2014	16	0	None	0	0

Table 10: Type, number and quantity of ivory items sold in the different markets in Pointe Noire, Congo

Item	Size / Description	Starting price in USD	Final price in USD
Necklace	Medium beads, 60 g	83	42
Chess pieces (2)	20 cm, 200 g each	104	63

Table 11: Range of retail prices of ivory items in Pointe Noire, Republic of Congo, 2014 $USD1=FCFA500\ in\ 2014$

Item	Size / Description	Starting price in USD	Final price in USD
Necklace	Medium beads, 75 g	52 - 73	31
Name seal	Small		31
Animal figurines	20 cm, 400 g lion	177	125
Head profiles	6 cm high		31
	8 cm high		50
Human busts	15 cm, 400 g	125	
	20 cm, 230 g	146	
	45 cm, 4.5 kg	1460	625
Statues	22 cm, 400 g	250	125
	40 cm, 800 g	625	417
	15 cm, 100 g Buddha		200
Polished tusks	25 cm, 800 g (single)	234	
	50 cm, 2.5 kg	469	313
Carved boxes	5 cm, 30 g		52
Combs	15 cm		31
Pipes	15 – 20 cm	73	42

Table 12: Range of retail prices of ivory items in Pointe Noire, Republic of Congo, 2009 About 74 kg, over 240 items in 12 outlets were counted during the 2009 survey in Pointe Noire. USD1 = FCFA480

Workshops and Ivory Carving

Five workshops were visited in Pointe Noire in 2009 that were attached to the chalets of the Village des voiliers. Carvers at these workshops were actively working on wood products and no ivory carvings were observed. One of the vendors at the Marché artisanal de Gaulle indicated that he had his raw ivory worked in Kinshasa because local carvers in Pointe Noire were not skilled and as a result he lost a lot of precious raw ivory in the past because of poor carving.

In 2014, no ivory carving workshops were sighted in the markets and the dealer known as Didier of the Marché de Plateau indicated that most of his carvings were done in DRC, whilst others were brought from Cameroon. Two carving workshops were found near the Hotel Azur, respectively known as Helices Volant and Centre N'kassou. Discussions with four of the carvers there indicated that they supply clients in the big hotels, but mainly with items made from wood and clay. However, one of the carvers named Jean-Claude, who was about 70 years old, indicated that he still receives orders for ivory items from vendors in Pointe Noire but refused to give the location of these individuals. He also complained of limited demand for worked ivory items and was very unhappy with the foreigners who have come and taken over their country and their businesses, citing Chinese as the worst. In his words, "They come here and take all the big contracts and now are even taking away our means

"'Ivory is like a drug and you have to be careful with it. If you are serious and desire it, you can get all you want, but you have to be patient and act very carefully."

- Curio Shop Owner

of living which is carving. I have been in this business for about 50 years and you think I can change from doing this?"

Source and Prices for Raw Ivory

The northern part of Congo, DRC, Angola and even Benin (ivory coming in by sea) were cited as the main sources of ivory found in Pointe Noire during the 2009 and 2014 surveys. The average price of raw ivory is given in Table 13.

Figure 5 shows the general movement of raw elephant tusks in the Republic of Congo supplying both Brazzaville and Pointe Noire.



Photo 2: Front view of Marché de Plateau at Pointe Noire, Congo, October 2014 ©TRAFFIC / Sone Nkoke.



Photo 3: Necklaces made of bones and ivory displayed in George's shop, Pointe Noire, Congo, October 2014 @TRAFFIC / Sone Nkoke.



Photo 4: Jean-Claude the old carver working on a crocodile piece from wood at Pointe Noire, Congo, October 2014 ©TRAFFIC / Sone Nkoke.

Table 13: Prices of raw tusks over the years and comments in Pointe Noire, Congo

Year	Average price (USD) per kg		Comment
	Tusks below 5 kg	Tusks above 5 kg	Raw ivory is available but the trade has gone deeply
2009	105	200	underground and one has to be
2014	187	332	trusted to be able to see it.

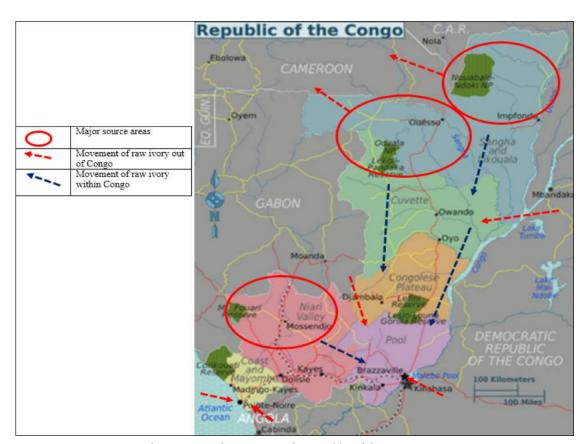


Figure 5: Major sources and movement of raw ivory in the Republic of the Congo



3.3 Central African Republic (CAR)

CAR continues to lose its elephants, which were formerly found in northern and eastern savannah areas as well as forested areas in the southwest of the country. Surveys over the last ten years can only confirm a population estimate of 702 (±245), but unsurveyed portions of the country may possibly harbour between 699 to 826 more elephants (Thouless *et al.*, 2016). The one stronghold of forest elephants, the Dzanga Sangha landscape, is contiguous with the Nouabale Ndoki complex in Congo.

In CAR, all the places visited during the 1999 survey undertaken by Martin and Stiles were revisited in TRAFFIC's subsequent surveys. During their survey in June 1999, 26 retail outlets and three workshops were found selling 2,219 ivory products, weighing an estimated 211 kg (Martin & Stiles, 2000). TRAFFIC's first survey in Bangui was carried out from 26 April to 2 May 2007, and two years later, from 5 to 9 April 2009, a second survey was undertaken. Finally, a third survey was carried out from 9 to 12 June 2015. The 2015 survey took place in an atmosphere of insecurity in the country which has persisted since the civil war in 2012. The northern and northeastern parts of the country are only partially controlled by the government and elephant populations in these areas are reportedly threatened by poachers crossing the borders from Sudan and Chad. It is also an area with a high presence of Séléka rebels, making it difficult for the government to exert any form of control and law and order.

Poaching of elephants is a very serious problem in CAR. Poachers, generally known as "Sudanese" but who are in fact either Sudanese or Chadians, typically enter the country in heavily-armed groups of 60 to 100 men on foot, horse or camel every December, settle together in seasonal camps, undertake wideranging hunting activities, and then leave the

country with the first rains in May. According to informants, Chadians or Sudanese are believed to be loosely connected with ethnic Chinese ivory buyers based in Sudan. Nomadic Sudanese herdsmen who come south in search of water and grazing, which are seriously lacking in their home regions, often employ Chadians to protect their herds and poach elephants. According to the government, some Sudanese herdsmen have also bought pieces of land in northern CAR from local chiefs and come every year to enjoy the high-quality pastures. Although this kind of transaction is ostensibly illegal, the herdsmen claim ownership over the land and use armed men for protection against threats to grazing cattle, including rangers working to keep livestock out of protected areas.

The situation in June 2015 had not changed since the advent of the civil war with the Séléka rebel group which was still in control of most of the northern part of CAR. According to Mr. Ndallot, the Director of Wildlife and Protected Areas, the government remains disjointed and is struggling to maintain stability, poaching in rebel-controlled areas is out of control and the Séléka are believed to be trafficking ivory to fund their activities and purchase of armaments.

Furthermore, according to a recent study (Ondoua Ondoua *et al.*, in prep.), in the Garamba-Bili-Chinko landscape of southeast CAR and northeast DRC, there is evidence for intensive elephant poaching for ivory and also several ivory trading networks operational on the ground in connection with, and due to, the presence of several armed militia and groups. The poached ivory from that transboundary landscape is smuggled out of CAR and DRC to Sudan, South Sudan, Chad and Uganda.

Legislation and Policy

The Central African Republic prohibited elephant hunting in 1985 under government Order No. 85/005 of 30 January 1985, and Order No. 85/046 of 31 October 1985, followed by an implementation mandate Decree No. 85/364 which prohibits the collection and trade of ivory in CAR by individuals. This legislation is enforced by wildlife officials and personnel of other enforcement agencies, with the support of NGOs such as WWF. According to Emmanuel Melvis Ngoumbango, Chief of Bureau for National Wildlife Laws and Treaties, and per the

contributions of the representative of CAR at the regional national ivory action plan (NIAP) workshop in Kinshasa in November 2015 (Nkoke *et al.*, 2016), ivory trade is totally banned in CAR.

The reality on the ground, however, is very different. Legislation is not properly implemented, or is only loosely interpreted, and officials in charge of wildlife management seem to ignore it most of the time. During the 2007 survey, investigations showed that the Ministry of Taxes used to issue licences for ivory trade. The Ministry of Water and Forests officially organized raw ivory auction sales coming from illegal sources. Carvers holding authentic licences could purchase raw ivory at fixed prices set by the Ministry. The last official ivory sale of this type took place in 2002. According to some officials and traders, domestic ivory trade was effectively legal in CAR in 2009 and beset by conflicts of interest, corruption within various government authorities, and a lack of political will.

In 2009, the prevailing legal situation with regards to elephant ivory trade had not changed significantly. Legally, ivory auction sales were still under the responsibility of the services of the Office of State Property, *Direction des Domaines*, while the Ministry of Waters and Forests remained officially in charge of issuing licences to carvers and vendors. Aware that doing so was a violation of the country's legislation, the Wildlife Director managed to postpone ivory law enforcement operations *sine die* — without a

"Ivory trade is totally banned in CAR. The reality on the ground, however, is very different."

stated date for resumption. A review the Wildlife Protection Code (*Code de protection de la faune sauvage* through Order No. 84/045 of 27 July 1984) and related legislation was started in 2013 according to Mr. Ndallot, Director of Wildlife and Protected Areas, during the 2015 survey.

Government-held Ivory Stockpiles

Ivory stockpiles in Bangui were surveyed in 2007 and again in 2009. No stockpile survey took place in the 2015 survey, however, as the storage facility had been looted by rebels. During the 2007 and 2009 surveys, the ivory was stored in the headquarters of the Ministry of Waters and Forests, but it was managed by the General Director of Support Services (*Directeur Général des Services d'Appui*). Management responsibility has since been handed over to the ministry in charge of wildlife at the time of the 2015 survey. Table 14 presents the quantity of ivory in the CAR national stock over the years.

Year	Quantity	Comments
2007	~200 kg	From 2003 through 2007, about a tonne of ivory had been seized, but during the civil unrest in 2003–2004, and again in 2006, about 250 kg of ivory were said to have been looted in Bangui and 480 kg from the ECOFAC store in Sangha/Ndélé in northern CAR.
2009	>500 kg	Not all of the tusks in the stockpile had been marked using the proper CITES marking system e.g. size and weight were marked, but a CITES serial number was not written on the tusks; there was no stock inventory book registering all the entries.
2014	0	All ivory in the Bangui stock house was looted in March 2013 by Séléka rebels. Prior to this, 148 full elephant tusks and 108 ivory pieces were present, but had not been weighed because of a lack of proper equipment. Seven tusks (weight unknown) were reported to be at Bayanga but still had to be conveyed to Bangui.

Table 14: Quantity of ivory in the national stockpile of CAR

3.3.1 Bangui

International Airport and Hotels

No ivory items were observed at the Bangui Airport or were on display in the main hotels (Sofitel Hotel, Somba Hotel or Hotel du Centre) in either the 2007, 2009 or 2015 surveys. In 2015, some additional hotels were visited (the Ledger Plaza Hotel, the Bangui Hotel, National Hotel, Gust Hotel and Hotel Levy's) but no ivory items were observed in these locations either.

Markets

The artisanal or crafts market, Marché de l'artisanat is the main market for the sale of worked ivory items in Bangui. The quantity of ivory recorded in that market over the years is shown in Table 15.

Most vendors of raw and worked ivory items in the market in CAR are either from Senegal, Cameroon or DRC, but a few were native to CAR. In the 2015 survey, only one market outlet owned by a Senegalese called Abdul displayed a few ivory items: two hairpins made of ivory mixed with other items made out of bones. He indicated that most of the shops in the market that were closed belonged to Muslims who had fled Bangui because of the civil war and were afraid of attacks from the Anti-Balaka (opposing the Séléka rebels). Those who remained were trading mostly in clothing and jewellery. He explained that there was discriminatory harassment by wildlife officials and the police, targeting Senegalese and Muslims but not disturbing Cameroonians and nationals of CAR. This had obliged them to go underground.

This allegation of harassment and discrimination was confirmed by Mr. Yarissem, the WWF Country Director. Tables 16 and 17 show ivory items and prices in 2007 and 2009 respectively.

Workshops and Ivory Carving in Bangui

Bangui is not a big centre for ivory carving. The few workshops identified in 2007 and 2009 had reverted to wood and bone carving as their main activity in 2015 due to scarcity of raw ivory. Two workshops had been identified in 2007, one located near Hotel du Centre, the other opposite the market in the city centre and owned by Mr. Peroni, a well-known ivory carver at the time. Ten ivory items weighing less than 1.5 kg were on sale in Mr. Peroni's shop. Information gathered later in 2009 showed that Mr. Peroni died in 2008 and his shop closed down. The main workshop identified in 2009 was located close to Bokanda crossroad in the Lakouanga neighbourhood. It produced woodcarvings but could still provide carved ivory on order. Apart from this workshop, informants reported the existence of a few carvers scattered around the city working on the basis of direct orders. In 2015, one workshop was identified in the craft market hidden behind a clothing shop belonging to a Cameroonian. Two carvers were found in the shop working on wood items. Most carvers recorded during the surveys reportedly came from DRC, Cameroon and Senegal, but a few were CAR nationals.



Photo 5: Ivory hairpins mixed with bone hairpins in Abdul's shop, Bangui, CAR, June 2015 ©TRAFFIC / Sone Nkoke.

Year	Total Number of Stalls	Number of Stalls Selling Ivory	Type of Ivory Item	Number of Ivory Items	Total Estimated Weight
2007	34	12	Statues, combs, bracelets, tusks etc.	230	48 kg
2009	23	10	Bracelets, figurines, statues etc.	62	10 kg
2015	27	1	Hairpins	2	<500 g

Table 15: Type, number and quantity of ivory items sold in Bangui, CAR over the years

Item	Size / Description	Starting price in USD	Final price in USD
Bracelet	2 cm	94	15
	1 cm	47	10
Animal (Crocodile)	< 1 kg		52
Statues (Virgin Mary)	50 cm, 1.8 kg		729
***	35 cm, <2 kg	375	292
Polished tusks	80 cm, 7 kg (pair)	520	354
	40 cm, 1.5 kg	146	125
Carved tusk	35 cm, 1 kg		83
	25 cm, < 1 kg		52
Hollow tusk base	800 g		167
Chessboard	35 x 35 cm		167
Chopsticks			15
Combs	16 x 12 cm	73	30

Table 16: Range of retail prices of ivory items in Bangui, CAR, 2007 $USD1 = FCFA480 \ in \ 2007$

Item	Size / Description	Starting price in USD	Final price in USD
Bracelet	1.5 cm		17
	2 cm	52	35
	2.5 cm	52	42
Statue	20 cm, 800 g	417	250
	18 cm, 250 g (4)	125	83
	22 cm, 1 kg		625
	15 cm, 300 g		73
Polished tusks	60 cm, 4 kg (pair)	667	625
Carved tusk	45 cm, 1 kg		600
Horn	65 cm, 3 kg	2500	1000
Ceremonial spoon	15 cm, 1 kg	1250	600
Mosaic frame	35 cm x 25 cm	31	21
	55 cm x 55 cm		94

Table 17: Range of retail prices of ivory items in Bangui, CAR, 2009 $USD1 = FCFA480 \ in \ 2009$

Source and Price for Raw Ivory in Bangui

The main sources of raw ivory found in Bangui in 2007 and 2009 were DRC and northern and northeastern parts of CAR. During the 2015 survey, it was reported that these regions were still the main source of raw ivory entering Bangui, but ivory also came from Bayanga, which is the main collection point from southwest area of CAR that includes the Dzanga Sangha, Ndoki and Ngoto protected areas. Chadians and Sudanese were often implicated in poaching and ivory trafficking in the northern part of the country, and one Senegalese vendor met in the craft market indicated that most of his raw ivory comes from the north of CAR. Tusks from DRC are also brought in across the Oubangui river, with the Garamba National Park said to be a major source. Sources and movement of raw elephant tusks in CAR are indicated in Figure 6 and the change in prices shown in Figure 7.

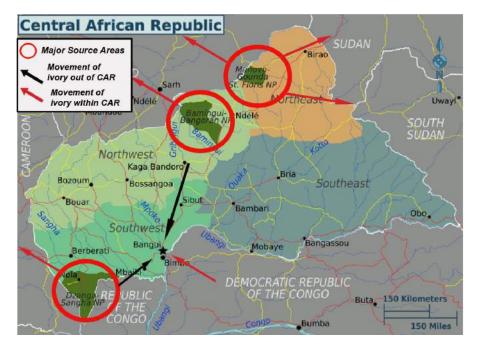


Figure 6: Major sources and movement of raw ivory in CAR Source of map -http://wikitravel.org/en/Central_African_Republic

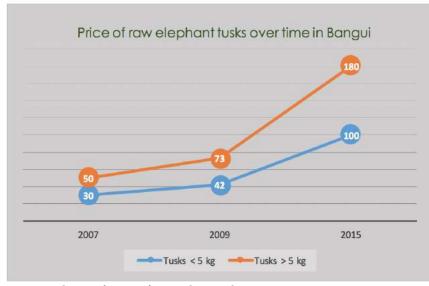


Figure 7: Change of prices of raw tusks over the years in Bangui, CAR



Photo 6: Abdul, a Senegalese vendor explaining ivory trade in Bangui, CAR, June 2015 ©TRAFFIC / Sone Nkoke



3.4 DEMOCRATIC REPUBLIC OF CONGO (DRC)

With some 60% of the continent's tropical forest and large savannah regions in northeastern and southern parts of the country, DRC once held Central Africa's largest elephant population and still has the largest potential elephant range in the region. Decades of serious poaching, civil unrest, human encroachment and displacement, and unregulated ivory trade, however, have produced catastrophic impacts on the country's elephant population. Areas surveyed over the last ten years are now estimated to hold only 1,794 (±52 elephants), whilst large expanses of unsurveyed range in DRC may possibly hold 7,803 to 9,337 more animals (Thouless et al., 2016).

The first survey in DRC was conducted in Kinshasa from 8 to 17 May 2007. Continuous political instability and insecurity in the eastern part of the country prevented any investigation from taking place in that region, as was the case during the 1999 survey by Martin and Stiles. The second survey took place from 7 to 28 May 2009 and, on that occasion, coverage was extended to Kisangani, Goma, Lubumbashi and Bukavu. Further surveys were carried out from 3 to 11 February 2015, and a follow-up survey from 13 to 20 November 2015, but both limited to Kinshasa.

The abundance of guns in DRC and the long-term presence of armed forces has led to very high levels of poaching and a dramatic decrease in elephant populations around Kisangani, as well as northern and southern Kivu provinces. In the 2015 survey, the problem of security in the eastern part of the country still persisted, in addition to a tense political environment in Kinshasa owing to an attempt by the President to modify the constitution and extend his mandate, which was vehemently opposed by the opposition parties.

According to Dr. Pierre Boyzibu of Institut Congolais de Conservation de la Nature (ICCN - Congolese Institute for the Conservation of Nature), the Virunga National Park sheltered about 2,700 elephants in 1995; only around 300 were believed to be left in early 2009. Two non-State military groups, the Lord's Resistance Army (LRA) and Forces Démocratique de Libération du Rwanda (FDLR), have been in and around the forests of eastern and northern DRC for years, killing wildlife for bushmeat, and trafficking Makala (charcoal) and ivory. DRC's State army, Forces Armées de la RDC (FARDC), is also involved in these crimes. According to some conservation and developmental NGOs present in this part of DRC, as long as these armed forces are roaming in the region, there is little hope for wildlife in general and the remaining elephants, in particular, are at risk.

In a recent study (Ondoua Ondoua et al., in prep.), in the Garamba-Bili-Chinko landscape of southeast CAR and northeast DRC, there is evidence for intensive elephant poaching for ivory and also several ivory trading networks operational on the ground in connection with and due to the presence of several armed militia and groups. The poached ivory from that transboundary landscape is smuggled out of CAR and DRC to Sudan, South Sudan, Chad and Uganda.

"As long as these armed forces are roaming in the region, there is little hope for wildlife - and the remaining elephants, in particular, are at risk."

Legislation and Policy

The elephant is totally protected in the DRC under Law No. 82-002 of 28 May 1982. However, the Ministry of Art and Culture still issues licences to the Ivory Carvers Association (Union des Artistes Ivoiriers du Congo - UNARICO) to carve ivory and even provides permits for ivory exports. In 2005, the Ministry of Environment officially informed UNARICO by letter No. 0207/SG/ECN/EF/2005 of 12 February 2005, that ivory trade was illegal and that raw and/or worked ivory was to be confiscated and stored in the official stockpile. There was no

subsequent enforcement until March 2017, when actions by ICCN and the Ministry of Environment with the support of the police and the judiciary in Kinshasa's Bikeko market succeeded in at least temporarily preventing open sales of ivory.

Another area of conflict identified in DRC during these surveys was the absence of clarity in the law concerning which government department, the Department of Nature Conservation of the Ministry of Environment or the ICCN, was responsible for implementation and enforcement of the country's wildlife laws. ICCN is in charge of protected areas and wildlife occurring within a 50 km radius around protected areas and also serves as DRC's CITES Scientific Authority, while the Ministry of Environment—which serves as serves as DRC's CITES Management Authority—is responsible for wildlife in other parts of the national territory. This has been addressed in the new law 14/003 of 11 February 2014 on the conservation of nature which confers wildlife law enforcement activities to ICCN in addition to ivory stockpile management. If enforced, the law may have the strongest deterrent effect among wildlife laws in the whole of the Central African region, as Article 79 mandates prison terms of five to ten years and fines of twenty to one hundred million Congolese Francs (USD20,000 to USD100,000 at USD1 = FC1,000 in 2015) as penalties.

That said, the Bikeko market, located at the *Boulevard du 30 Juin* opposite *Immeuble Royale* in Kinshasa, was still unregulated during investigator visits in 2015, with both raw and worked ivory openly sold in contravention of current legislation. No billboards or public awareness materials indicating that ivory trade in DRC is illegal were observed in or around the market during all of the surveys conducted in 2007, 2009 and 2015. In spite of the DRC's legislation, unregulated ivory trade persists.

Government-held Ivory Stockpiles

The DRC's ivory stockpiles are stored in the Central Bank (*Banque Centrale*) in Kinshasa and in its branches at the provinces, and the ICCN is responsible for stockpile management. Other stockpiles are also found in the premises of national park headquarters because of insufficient resources and complicated logistics surrounding transport to Kinshasa. During all the surveys in Kinshasa in 2007, 2009 and 2015, access to the ivory stockpile was not allowed. However, through various meetings and discussions with officials of ICCN, the information on the national stock presented in Table 18 was obtained.

The management of ivory stockpiles in the provinces and Kinshasa is not seen to be effective. For example, the authorities responsible for the stockpile management do not know the precise amount of ivory in the stockpile. During the 2015 survey, raw tusks and worked ivory pieces were found littered around the office of a high-ranking official in Kinshasa, signaling a high potential for leakage into the local market.

3.4.1 Kinshasa

In June 1999, a six-day ivory market survey of Kinshasa found 28 retail outlets and 13 ivory carving workshops selling 4,324 ivory products, weighing an estimated 486 kg (Martin & Stiles, 2000). In 2007, eight years after this survey, the ivory trade in Kinshasa was still concentrated in the Bikeko market and offered the greatest volume of ivory observed in the whole of Central Africa. This same situation was still the case during two subsequent surveys in 2009 and 2015. Indeed, during the 2015 survey, the Bikeko market was still the most important ivory market in DRC, as attested by the vendors themselves and other sources, in spite of its relocation in November 2015 to another location adjacent to the old site.

Year	Quantity (kg)	Comments
2007	10,424	507 undetermined pieces in the ICCN provincial branches
2009	10,523	555 unweighed pieces in the ICCN provincial branches. In February 2009, part of the Garamba National Park stockpile, totalling an estimated 2,800 kg, was burnt during fighting with the LRA.
2015	>20,000	Quantity of ivory in the provinces unknown

Table 18: Quantity of ivory in the national stock in Kinshasa, DRC

International Airport and Hotels

A few small ivory items were observed in a shop at Kinshasa's international airport in 2007, which could "easily be hidden in hand luggage" as explained by the vendor. He indicated that the ivory business was not very lucrative, claiming not to sell many ivory items at once, only two or three articles to tourists once in a while. He had exhibited in his shop, fifteen bracelets at USD25 each, 20 necklaces at USD30 each and 20 rings at USD5. During the 2009 and 2015 surveys, however, the airport shop did not display any ivory items. According to John Kabange, a Customs official working at the Kinshasa international airport in 2015, periodic ivory seizures from passengers do occur, and these included Africans as well as Chinese, Vietnamese and some Pakistanis working with the UN peace keeping forces in DRC.

No ivory items were observed in the Memling Hotel in 2007 and 2009; one shop at the Grand Hôtel/ Intercontinental displayed one ivory item (an old 45 cm trumpet, weighing around 0.8 kg, for USD200 in 2007), but nothing was found in 2009. None of these hotels displayed any ivory items in 2015.

"The ivory trade in Kinshasa was still concentrated in the Bikeko market and offered the greatest volume of ivory observed in the whole of Central Africa."

Shops

The *Symphonie des arts*, or Art School shop, which had previously been visited during the 1999 survey and was managed by a Belgium family, displayed no ivory items when assessed in 2007 and five ivory items in 2009: three old small statues and two 20 cm carved pieces of ivory tusk of about 0.3 kg each. The vendor indicated that the articles were for exhibition purposes only and not for sale. These same shops were visited during the 2015 survey but they displayed no ivory.

Markets

The main ivory market in DRC, indeed the largest in Central Africa, is the Bikeko market in Kinshasa which was surveyed in 2007, 2009 and 2015. The number of stalls recorded in the market and the quantity of ivory on sale is presented in Table 19. Table 20 shows the type and range of prices of ivory items in Kinshasa in 2007.

According to the vendors during the 2007 survey, their best customers at the time were Italians, Russians and Chinese. The French bought ivory items occasionally, while very few US citizens bought ivory. The Chinese bought small items that could be hidden in their shoes, suitcases with double bottoms, or hand luggage. When sales were very poor, vendors in desperate need of money often sought out West African clients, as they are always willing to buy, but at much lower prices than Europeans or Chinese customers.

Other wildlife products sold in the Bikeko market besides ivory items included elephant hair bracelets, sold at USD3.5 each; live (African) Grey Parrots Psittacus erithacus in cages containing up to 20

Year	Total Number of Stalls	Number of Stalls Selling Ivory	Type of Ivory Item	Number of Ivory Items	Total Estimated Weight
2007	40	27	Statues, rings, caravans, tusks, etc.	~3,110	556 kg
2009	43	25	Bracelets, figurines, statues, name seals, etc.	~2,650	>345 kg
2015	57	31	Necklaces, bracelets, chopsticks, statues, animal carvings, etc.	~4,251	>400 kg

Table 19: Type, number and quantity of ivory items sold over the years in Kinshasa, DRC

birds, each sold for USD75 for a domesticated bird and USD45 for a wild specimen; Leopard *Panthera pardus* parts, including skins and claws; African Civet *Civettictis civetta* and crocodile *Crocodylinae spp*, skins; and large felid *Felidae spp*. teeth.

There was no significant change in the Bikeko market in the 2009 survey. The quantity of ivory items on display and the number of stalls were more or less the same as in the 2007 survey. In order to get reliable and precise records, the investigator had to contract a Congolese journalist to take photos of stalls which had significant quantities of ivory items (as vendors would not allow photography by the investigator). Table 21 gives some indication of retail prices for various ivory items in Kinshasa in May 2009.

During the 2015 survey, but unlike 2009, other wildlife products were not clearly on display apart from two skins of African Civets and felid teeth used in some necklaces. Chinese, Pakistani and Vietnamese were the preferred clients of vendors because they paid well, and to a lesser extent, Senegalese because they provided a steady market in West Africa. According to one of the vendors called "Riva," he had been in the business since 1972, and had traded in several other African countries such as Cameroon, Congo, Gabon, Nigeria and Senegal, including raw ivory tusks at times. In spite of all the discussions with vendors and information gathered through investigations, it was still difficult to ascertain with precision the quantity of ivory in the market and the average monthly sales. However, based on the findings, it is estimated that more than 100 kg of carved ivory items were being sold each month. The prices vary from one item to another as indicated in Table 22, depending on the ability to negotiate, the type of vendor and the

customer. Europeans and Asians are charged higher prices than Africans but there is a range as agreed by all the vendors.

The Bikeko market was again visited in November 2015 and still found to be unregulated, with ivory items openly displayed. Two pairs of raw elephant tusks were recorded with the vendors indicating that they were still receiving orders for ivory items. Compared to the February 2015 survey, the number of stalls with ivory items had reduced significantly with only 12 recorded in November as opposed to 31 in February 2015. This finding should be taken with caution, however, because the area surveyed was a temporary location about 100 metres from the old market; it was significantly smaller than the original market and some of the vendors were reportedly scattered in other parts of the city waiting for the construction of the new art market promised by the government. With ivory still openly displayed, it was evident that the vendors have little or no pressure from wildlife or law enforcement authorities. Figurines, religious figures and other statuettes, bangles, hairpins and combs were all displayed. Polished tusks were also displayed and more expensive compared to the February 2015 visit with the pair previously priced at USD4,000 starting price and USD1,500 as final price now selling for USD6,000 first price and USD2,000 final price.

"It is estimated that more than 100 kg of carved ivory items were being sold each month [in 2015]."

Item	Size / Description	Starting price in USD	Final price in USD
Ring	5 – 10 g	5	3
Lion figurines	10 cm, 200 g	100	60
	20 cm, 500 g	200	150
	25 cm, 1.5 kg	400	275
Statues	27 cm, 900 g	250	150
	32 cm, 1 kg	400	275
	45 cm, 3 kg	700	475
Carved tusks	60 cm, 1.2 kg (pair)	650	450
Elephant caravan	6 kg	1400	1000
Animal caravan	50 cm, 500 g	250	150

Table 20: Range of retail prices of ivory items in Kinshasa, DRC, 2007

Item	Size / Description	Starting price in USD	Final price in USD
Necklace	Small beads	60	40
	Medium beads	80	60
	Large beads	120	80 - 90
Bracelet	1 cm width		25
	1.2 cm width (carved)	70	35
Ring	5 – 10 g	10	7
Name seal	Large, 450 g	180	90
Crescent	10 cm	25	20
Animal figurine	15 cm, 200 g	180	120
	18 cm, 400 g	350	225
	22 cm, 800 g	600-800	350-450
	25 cm, 1.3 kg	1200	500
Buddha statue	30 cm, 800 g	400	
0	50 051	c000	2500
Statue	52 cm, 8.5 kg	6000	3500
	50 cm, 6.5 kg	4000 800	2500 400
	28 cm, 800 g	600	400
Human bust	23 cm, 1.8 kg		500
Mermaid by Male	47 cm, 2.3 kg	2000	1100
*	40 cm, 900 g	1000	600
	25 cm, 400 g	350	200
Fruit platter	12 pieces	1200	700
Polished tusks	60 cm, 3.5 kg (pair)	1200	650-800
	65 cm, 4.5 kg (pair)	2500	1100
	65 cm, 5.5 kg (single)	3000	2100
Carved tusks	38 cm, 1 kg	900	500
	60 cm, 1.1 kg		600
	65 cm, 5.5 kg	3000	2100
Animal caravan	50 cm, 1 kg		350
	55 cm, 850 g	600	400
Chopsticks	Pair		25

Table 21: Range of retail prices of ivory items in Kinshasa, DRC, 2009

Item	Size / Description	Starting price in USD	Final price in USD
Necklace	Small beads	250	150 - 200
	Large beads	300	200 - 250
Bracelet	<1 cm width	90 - 150	30 - 45
	>2.5 cm width	200	80 - 100
Ring	5 – 10 g	20	5 - 11
Earring	5 – 10 cm	40 – 60 per pair	15 - 20
Hair clip	8 – 13 cm	80 - 200	20 - 75
Crescent	10 cm	70 - 150	15 - 50
Comb	20 cm	100 - 300	50
Animal figurines	10 – 15 cm	300 - 400	150 - 250
	20 cm, 400 g (lion)	500	300
Chopsticks	25 cm, 50 g	250 per pair	110
Buddha	15 cm, 40 g	180	100
Virgin Mary statue	25 cm, 300 g	1000	600
Bust (lady)	30 cm, 400 g	900	600
Polished tusks	35 cm, 500 g (single)	1200	500
	50 cm, 2 kg (x8)	4000 (for a pair)	1500
Olive sticks in holder	8 – sticks per holder	300	100
Key chain	5 – 10 cm	50 - 150	12 - 30

Table 22: Range of retail prices of ivory items in Kinshasa, DRC, February 2015 NB: Converted from FC to USD at a rate of USD1 = FC1,000 as of February 2015 rate

Workshop and Ivory Carving

Kinshasa has a long tradition of ivory carving, and in spite of recurrent complaints from the various actors in the trade chain, domestic ivory trade is still very active. Some of the workshops that were visited and some of the items found in these shops during the surveys are presented in Table 23.

According to Mr. Male, the director of UNARICO—the Congolese ivory artist association comprising of carvers and traders—there were about 100 registered members during the 2007 survey. However, only five to seven workshops regularly carved big pieces and statues. He also indicated that many of the former carvers had stopped carving because of raw ivory shortages and the scarcity of clients. The tourism

industry had virtually collapsed because of protracted political instability and thus potential ivory buyers were scarce. The members of the association reportedly worked and traded according to different schemes. Some were local traders investing in raw ivory, had it carved in workshops and then sold the finished products through the market vendors they commissioned. Others were vendors with enough money to buy raw ivory and have it carved in workshops, then sell the items for themselves. Also, some were carvers that bought their own raw ivory, carved it themselves and employed a vendor to sell the finished products for them.

During the 2015 survey, of all the other workshops mentioned in the 2009 survey, only that belonging to Male could be located with the others said to

have closed or carvers working from their homes. Two carvers at the workshop asserted that ivory trade was no longer very lucrative because of a lack of customers. Another investigator indicated that carvers still worked on ivory pieces if there is an order.

Three carving workshops were seen in the vicinity of the Bikeko market, one of them owned by Riva, the long-time vendor. As a precaution, and to avoid detection by law enforcement agents, ivory carvers usually place wooden pieces in front of their table. Riva agreed to show the investigator his workshop because of the trust he had for him. He showed him some semi-worked ivory pieces, similar to those that were on display in the stalls including necklaces, bracelets and animal figures. Riva also had a room near the workshop for raw tusks with 13 tusks with an average weight of 20 kg shown to the investigator. According to Riva, most carvers prefer to work from home and supply vendors, to avoid headaches with law enforcement agents; and many others had simply turned into suppliers of raw ivory for West Africans. The two other workshops in the market were sandwiched between two bars selling beer and food. One of the workshops had a shoe mender in the front room while the ivory carving took place in the inner room, accessible only to a select few. The other workshop had simply put wood carvings at the forefront. One of the carvers was said to be from Guinea (Conakry). Another carving workshop at Ndolo, identified from information obtained by another investigator, had only wooden items.

Source and Prices for Raw Ivory

According to some government officials, it was possible during Mobutu's era and before the 1989 ban on international ivory trade, to buy 10 kg to 35 kg of raw tusks a month legally from the State ivory authority, *Office de l'ivoire*. In the 1970s and 1980s, the carving community could also buy reasonable quantities of ivory from the *mouvanciers*, who were highly ranked people in Mobutu's circle, selling raw ivory "unofficially".

During the 2007 survey, most of the vendors at Bikeko market indicated that Lombo Lombo, which was situated in the southern part of Salonga National Park in the Equateur province, was the major source of raw ivory supplied to Kinshasa. According to the ICCN General Delegate (*Délégué Général*), poaching

"Many of the former carvers had stopped carving because of raw ivory shortages and the scarcity of clients."

rates were very high because of military presence (military people were reported to be poaching in the park) and a large quantity of guns available as a consequence of the civil war. With the decreasing elephant population in the park, supply of raw ivory was becoming more difficult and the price of raw ivory had gone up since 2005.

Angola was reported to be another source of raw ivory for some master carvers like Male and Tshangu during the 2007 survey. Another source of raw ivory that was reported was Virunga National Park. Bikeko vendors confirmed that not much raw ivory from eastern DRC reached Kinshasa as a good chunk was transported to Rwanda, Uganda, Burundi or Tanzania which were much closer and generally lacked effective border controls. The trade in raw ivory, probably in significant quantities, was reported to be organized by politicians and highranking government officials. Although informants could not provide details on the illegal transactions, they believed that the Chinese organized shipments of large quantities of raw ivory out of the country. The source and implication of Chinese involvement was also reported in the 2015 survey.

Given the vastness of the country, the inexistence of roads in most places and security issues, it is surprising to see that ivory still enters Kinshasa, especially from the eastern part of the country. One of the explanations was succinctly given by Riva in 2015. The ivory vendor said the main suppliers are government officials and, to some extent, UN peace keepers, who have the luxury to move around the country frequently. Riva said he has a relative who is a General in the army and who suppliers him raw ivory for a cut after sales. This can also explain why he can afford to have a room wherein he keeps raw ivory which at the time of the interview contained 13 tusks.

The change in average price of raw ivory during the survey periods in Kinshasa is shown in Figure 8.

Name / Workshop Location Market	Year	Number of Craftsmen	Likely Nationality of Craftsmen	Ivory Item	Quantity	Price (USD)		
Male	2007	6	DRC	Mermaid (about 5 kg)	1	-		
Workshop,				Carvings (9 kg)	5	-		
Isseko Avenue, in the				Statues	2	15		
"Commune de	2009	4	DRC	Carved tusk 40 cm, 600 g	3	-		
Barumbu"				Bust 33 cm, 4.5 kg	1	-		
				60 cm, 8.5 kg	1	-		
				Bust 50 cm, 6.5 kg	1	2,500		
				Bust 52 cm, 8.5 kg	1	3,500		
	2015	2	DRC	Wood carvings				
Mbaka	2007	5	DRC	Asian statue 20 cm, 0.5 kg	1	-		
Workshop in				Polished tusks (4.5 kg)	6	-		
the "Commune de Barumbu"	2009	No longer in existance, owner said to have died						
de Darumbu	2015	No longer in existance						
Saint Paul	2007	4	DRC	Bracelets 10 cm wide	10	-		
Workshop				Statues 15	7	-		
	2009	No longer in existance						
Tshangu	2007	4	DRC	Necklaces	6	-		
Workshop				Bracelets	4	10		
	2009	4	DRC	Items not displayed				
	2015	2	DRC	Wood carvings				
Riva Workshop	2015	6	DRC, Guinea	Necklaces	7	-		
				Bracelets	11	-		
				Animal figurines	3	-		

Table 23: Ivory Items in a major carving workshops in Kinshasa, DRC

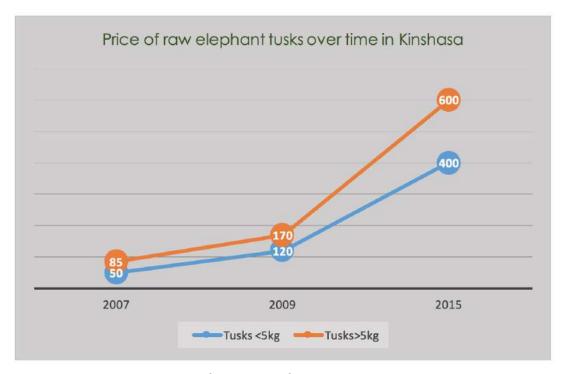


Figure 8: Increase in Ivory Prices over the years in Kinshasa, DRC



Photo 7: Bangles seized from a Vietnamese national at the Kinshasa airport in January 2015 by ICCN. Kinshasa, DRC, February 2015 ©TRAFFIC / Sone Nkoke.



Photo 8: Ivory items displayed in a stall in the Bikeko market. Kinshasa, DRC, February 2015 ©TRAFFIC / Sone Nkoke.



Photo 9: A pair of polished tusks displayed in the Bikeko market. Kinshasa, DRC, February 2015 ©TRAFFIC / Sone Nkoke.



Photo 10: Ivory items displayed in the Bikeko market. Kinshasa, DRC, May 2009 ©TRAFFIC / J.F. Lagrot



Photo 11: Stalls with worked ivory items displayed in the Bikeko market. Kinshasa, DRC, November 2015 ©TRAFFIC / Sone Nkoke.

3.4.2 Kisangani

Kisangani, DRC's third largest city, the capital of Orientale province and the largest inland port, sits in a strategic location on the Congo River in the eastern part of the country. Although Kisangani was visited during the 2009 survey, it has not always been accessible in recent years. In 2000–2001, when the war with the RCD (*Rassemblement Congolais pour la Démocratie*) was particularly intense, the area was not under the control of the central government. As a result, militia and army moved throughout the region and large numbers of elephants were poached for meat and ivory. The direct consequence was a sharp decrease of elephant populations around Kisangani and in eastern DRC (Amboya Apobo, 2014).

Retail Outlets and Prices for Worked Ivory

Information gathered showed that ivory trade was more prosperous when the *Mission de l'Organisation des Nations-Unies en République Démocratique du Congo* (MONUC - United Nations Mission in the Democratic Republic of the Congo) forces were stationed in Kisangani. Most bars and hotels were full every evening, and vendors would display handicrafts on the terraces or at the bar pub entrances. At the time of the survey in 2009, some vendors could still be seen in some of these places, but business was apparently much reduced and the city centre seemed to had fallen back into some sort of lethargy.

Hotels and Bars

In Hotel Riviera, three large statues of roughly 3 to 5 kg each and 45 to 65 cm high, respectively, were displayed in the dining room. The *Bar Hellenique* is one of the places where ivory vendors were said to come regularly every night to sell ivory articles. Things have since changed and their presence at this place became scarce. A waitress and some informants said the MONUC staff, especially those from Senegal, used to buy gold and diamonds in large quantities as well as ivory.

Outlets and shops

In Tchopo 3, a neighbourhood on the way out of town, four wooden shops were organized around an intersection. Each of the little shops were flanked with a workshop behind, open to the public.

"DRC once held Central Africa's largest elephant population and still has the largest potential elephant range in the region."

A former taxi driver reported that between 2000 and 2005, he often carried vendors from there to the airport where they sold their worked ivory to airline staff and passengers flying between Kisangani and Beni, Bunia and Goma. The airline staff were reportedly Russians or Ukrainians flying Antonov planes and transporting palm oil to Goma, and beans and vegetables back from Goma. The informant indicated they paid for ivory products in cash or fuel, and then took the worked ivory first to Goma before export. According to this informant, this trafficking was still ongoing with some air transport companies. The articles in Table 24 and their prices were recorded in stalls and shops in May 2009.

Workshop and Ivory Carving

The four workshops attached to the four wooden shops in the Tchopo 3 area were the only workshops identified in Kisangani. During the survey, carvers were seen working openly on wood and/or ivory because they held licences issued by the provincial department of the Ministry of Culture and Art to undertake this activity. A total of five people were working in the two workshops where carvers were sighted: three in the first workshop and two in the second workshop. All were carving very small pieces of ivory, such as 20 cm tusks weighing between 0.18 kg and 0.2 kg. Kisangani was reported to be the only place where raw ivory was sold in *coli*, i.e. a bunch of four very small tusks from female elephants. All the carvers recorded were nationals of DRC.

Source and Price for Raw Ivory

According to an informant, the carvers usually got their ivory from villagers. Because of low tourism activity in the region, the informant assumed the villagers resold the best pieces of raw ivory to middlemen who took them to Kinshasa, Kampala (Uganda), Kigali (Rwanda) or Bujumbura (Burundi)

Item	Size / Description	Starting price in USD	Final price in USD
Necklace	Medium beads		20
	Small beads	15	5
Bracelet	1.2 cm width	50	40
6 Elephant figurines			20
2 Caravans items	45 cm, 850 g	100	70
Ring	5 – 10 g	3	1
Animal figure (Buffalo)	12 cm, 170 g	50	30
Carved tusks	25 cm, 600 g	80	50
	45 cm, 1 kg (pair)	300	220
Trumpets	60 cm, 1 kg	150	100
	50 cm, 1.5 kg	100	
	40 cm, 1 kg	80	
	30 cm, 750 g	70	

Table 24: Range of retail prices of ivory items in Kisangani, DRC, 2009

via Bunia or Goma, and only kept the smaller ones for local carving. Another reason was that several years of war had wiped out the elephant population around Kisangani. The remaining pachyderms in the area were at the time being poached from around Epulu in the Réserve de faune for Okapi, 400 kilometers from the city to the east and in the forests along River Lomami, a few days by canoe from Kisangani. A place called Obenge, in the nearby forests, was famous for concentrating raw ivory. Once in Kisangani, raw ivory could be transported down river to Kinshasa, where the many and often uncontrolled river beaches provided opportunities for the ivory to be disembarked safely. Another trade route followed the road to Bunia or Goma, where the ivory was sold in or exported from those cities. According to an informant, both possibilities were regularly used, depending on opportunities.

According to Mr. François, a carver at Tchopo 3, average prices for raw ivory in Kisangani are as follows:

- for large size tusks above 15 kg, USD100/kg;
- for medium size tusks above 10 kg: USD80/kg;
- for smaller sizes about 5 kg: USD50/kg;
- *coli* size about 2 kg: USD25/kg.

Chinese nationals, according to Mr François, were the main ivory buyers but government officials were also said to be involved in ivory trafficking.

3.4.3 Goma

The long-term presence of numerous international agencies and NGOs in Goma, the capital of Northern Kivu province, generated prosperity in that border town, situated on the northern shore of Lake Kivu. The town was busy in 2009 because of a fairly large population of expatriates. The road to the north quickly leads to the southern gate of Virunga National Park. FARDC, which used to have camps within the park boundaries according to an informant in 2009, still would enter the park regularly and, consequently, severely impact its wildlife through poaching and trafficking, as well as charcoal production and other activities.

Retail Outlets and Prices for Worked Ivory

Five outlets, one hotel, one shop and three outlets in the artefact market selling ivory items were identified in Goma.

Hotels and Shops

The following hotels were visited in Goma: Ihusi Hotel, VIP Hotel, Ishango Hotel, Cap Kivu Hotel, Linda Hotel and *Hôtel des grands Lacs*. As for shops, two opposite the Campus Universitaire du Lac were visited. Table 25 summarizes the type and prices of ivory items found in Goma in May 2009.

Market

The artefact market is situated in the town centre and consisted of a simple roofed twelve-metre-long structure. Table 26 gives an indication of retail prices for various ivory items recorded in Goma.

Workshop and Ivory Carving

Only one workshop was identified in Goma during the May 2009 survey, the Bon voyage workshop, which was also a vendor with about 200 ivory items for sale, weighing 30 kg when surveyed. The workshop was located near the Goma bus station, on the exit to Butembo, north of Goma. During the visit seven carvers were found in the workshop. This workshop was the focal point of the ivory market in Goma, as confirmed by Jean-Pierre Mirindi, a TRAFFIC correspondent. All vendors in Goma interested in ivory came there to buy and sell ivory items. The carvers in the workshop indicated that their best customers were Chinese and that they were interested mainly in bracelets, necklaces, name seals and sometimes statues. MONUC staff were also said to have been regular buyers, but then lapsed since the crisis of 2008 started.

Source and Price for Raw Ivory

In 2009, a high-ranking official in Kinshasa indicated that Virunga National Park was still an important source of raw ivory in Goma. Eleven elephant carcasses had been discovered within the park boundaries since 1 January 2009, mainly in the northern part of the park. Information gathered indicated that DRC's army, the FARDC, was one of the main groups responsible for elephant poaching in the park. The non-State FDLR was also said to be exporting ivory. Mr. Merode added that all the local armed forces present in the area were involved in ivory trafficking and also traded in bushmeat and charcoal. FARDC, he added, would even sell military equipment and guns to FDLR.

Some informants also seemed to confirm that ivory from Virunga National Park was supplying the local market, in addition to being exported out of the country. However, the carvers of Bon voyage workshop themselves claimed they never got ivory from Virunga National Park, asserting that their ivory came from elephants that were poached elsewhere by rebels for the export of the raw ivory to Rwanda or Uganda. They reported that their raw ivory supply, came from the town of Kindu, the capital city of Maniema province in central DRC, and from the forests further west. Another source of raw ivory mentioned was Walikale territory, one of the six territories of the North Kivu province. That area was reportedly unstable, with many armed troops occupying forested areas. Continued poaching for ivory in Maïko National Park, a 10,000 km² park north of Walikale, was also reported.

"Some informants also seemed to confirm that ivory from Virunga **National Park was** supplying the local market."

Hotel / Shop	Ivory Items	First Price (USD)	Final Price (USD)	Comments
Ihusi Hotel	Statue (27 cm, 1.1 kg)	600	400	Said to come from Kivu province and was
	Statue (17 cm, 350 g)		350	probably used for ritual ceremonies by the Rega people
Campus	2 Busts (15cm)		45	Also said to be from the Rega people
Universitaire du	Mask (20 cm, 900 g)	1,200	650	
Lac shop	Mask (28 cm, 750 g)	1,200	750	

Table 25: Range of retail prices in hotels and shops, Goma, DRC, 2009

Item	Size / Description	Starting price in USD
Necklace	Small beads	20
Bracelet	2 cm width	70
	1.2 cm width	35
Name seal	7 cm, 100 g	20
Hair pin		5
Human bust	10 cm, 20 g	35
	15 cm, 1 kg	90
	27 cm, 600 g	150
Heads	10 cm, 120 g	35
	15 cm, 1 kg	90
Masks	20 cm, 900 g	1200
	28 cm, 750 g	750
Statues	32 cm, 700 g	200
	23 cm, 800 g	120 - 135
	25 cm, 1 kg	600
Carved tusk	45 cm, 900 g (pair)	150
Comb	15 cm	20
Animal caravan	45 cm, 850 g	80

Table 26: Range of retail prices (first prices) of ivory items in the market, Goma, May 2009

Item	Size / Description	Starting price in USD	Final Price in USD
Necklace	Medium beads		25 - 30
	Small beads	30	25
Bracelet	2 cm width	80	35
	1 cm width	35	
Human bust	8 cm, 80 g		70
	15 cm, 1 kg		120
Carved tusks	14 cm, 400 g		70
	13 cm, 350 g		60
	7 cm, 90 g		40
Animal caravan	40 cm, 400 g		80
Rega masks	25 cm, 400 g (x2)	500	380 (x2)
Rega statue	9 cm, 50 g		10
Chopsticks	Pair		20 - 25

Table 27: Range of retail prices of ivory items in Bukavu, DRC, 2009

3.4.4 Bukavu

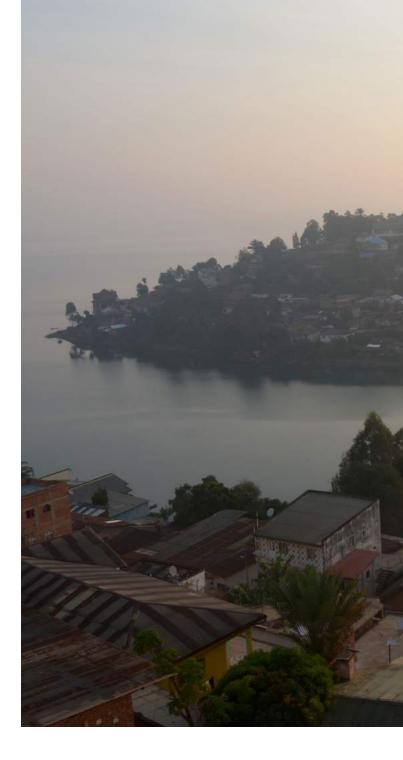
Bukavu, the capital of South Kivu Province, is situated on the southwest shore of Lake Kivu and was also visited in 2009. It is a two-and-a-half-hour boat trip from Goma and the main gateway to Kahuzi Biega National Park which is located 45 km north of the city. At the time of the visit, FARDC troops were settling down in Tchivanga station (the headquarter office of the Kahuzi Biega National Park) at the entrance of the park, which was very bad news for wildlife in general, and particularly for the gorillas that inhabited the higher altitude zone of the park not far from the park gate. As for the elephant population, only 10 to 30 individuals were reportedly left in this mountain area, while the remaining population on the plains of the park was unknown. Undertaking a census in the plains was considered too dangerous because of the presence of FARDC in the forests who were reportedly carrying out heavy poaching. A year later in 2010, WCS researchers suggested that there were 20 elephants left in the mountainous part of Kahuzi Biega National Park and perhaps 50 left in the lowland areas, (Thouless et al., 2016).

Retail Outlets and Prices for Worked Ivory

The main retail area for ivory in Bukavu was located opposite the Hotel Residence comprising of seven stalls. A total of 88 ivory items, with an estimated weight of 10 kg, were displayed. Vendors indicated that Italian nuns and missionaries were good customers, as well as French and other Europeans. According to them, Chinese from MONUC forces also bought a lot of ivory items. The vendors explained they were given appointments in some discrete places where the Chinese clients negotiated for significant quantities of ivory items. Table 27 gives an indication of retail prices for various ivory items in Bukavu in May 2009.

Workshop and Ivory Carving

Carvers were lodged in one main building known as *Confédération du Monde des Artisans* (CMA) in the industrial area of Bukavu. CMA is a kind of cooperative warehouse, as well as an official workshop where carvers work together. The eight people found working on wood pieces claimed they did not carve much ivory and no ivory carving was seen there. However, the carvers said that they would carve ivory on order.



"In 2010, WCS researchers suggested that there were 20 elephants left in the mountainous part of Kahuzi Biega National Park and perhaps 50 left in the lowland areas."

Source and Price for Raw Ivory

Kahuzi Biega and Virunga National Parks were mentioned as the main sources of ivory in Bukavu. The prices, like in many other cities, depend on the person buying and the bargaining power of the buyer. Table 28 gives an indication of prices of raw ivory in Bukavu.

Weight of Raw Tusk	First Price (USD)	Final Price (USD)
< 5 kg	350	270
> 5 kg	600	320

Table 28: Prices of raw ivory in Bukavu, DRC, May 2009

3.4.5 Lubumbashi

Situated in the extreme southeast of DRC near the border with Zambia, Lubumbashi is the second largest city in DRC, after Kinshasa, and the capital of Katanga province. There were no recent ivory surveys prior to the 2009 study, making the Lubumbashi assessment the first to investigate and assess internal and cross-border trade with neighbouring Zambia.

Retail Outlets and Prices for Worked Ivory

In fact, not many shops displayed ivory items. The only shop where ivory was observed was an internet café, close to the Reka Hotel. It exhibited a 60 cm long carved tusk, of approximately 1.8 kg. Worked ivory was principally found in two handicraft markets, one situated in the city centre in the central square opposite the Hotel Park, whilst the other was about seven kilometers out of the city in a suburb called La Ruashi. The market in the central square had 16 stalls selling ivory with more than 148 items for an estimated weight of 18 kg. The *Marché d'art* in La Ruashi had 33 stalls with seven selling ivory items, consisting of 72 worked ivory items weighing about 11.5 kg and 16 kg of raw ivory.

Vendors indicated that most of the ivory, including worked ivory, for sale in Lubumbashi came from Zambia, often brought across the border near the Solwezi border post. According to them, ivory trade was risky, heavily prosecuted, and denunciation of traffickers by the public and by other traffickers quite "There were no recent ivory surveys prior to the 2009 study, making the Lubumbashi assessment the first to investigate and assess internal and crossborder trade with neighbouring Zambia."

common in Zambia. Chinese were reported to be the main customers. Table 29 shows retail prices for various ivory items in both markets in Lubumbashi in May 2009.

Workshop and Ivory Carving

Workshops with carvers working full time on ivory were a rarity in Lubumbashi during the 2009 survey. Vendors in the two markets reported that most of the worked ivory for sale in Lubumbashi was either carved in Zambia, or by carvers who are not resident in the city. Carvers who formerly worked in the city had left for Zambia or for villages and smaller towns like Kipushi in DRC, 30 km from the capital city where business was supposedly better. According to the vendors at the *Marché d'Art la Ruashi* there are probably only a few carvers left working from home from time to time and upon request.

Source and Price for Raw Ivory

In addition to worked ivory, some vendors also traded in raw ivory. One of them offered a 16 kg tusk which reportedly came from Upemba National Park in Katanga province. He claimed to have a pair of 8-9 kg tusks, kept securely in Kipushi, around 30 km from Lubumbashi on the way to Zambia. This area was said to be a major source of raw ivory. According to vendors, the average price for raw ivory varied between USD100/kg and USD150/kg, coming from Zambia.

Item	Size / Description	Starting price in USD	Final Price in USD
Necklace	Medium beads	35	25
	Small beads	25	20
Bracelets	1.5 cm width	40	35
1.33.00.00	1 cm width	35	30
	2 cm width		40
Name seal	8 cm, 100 g	30	20
	7 cm, 50 g	20	15
Human bust	25 cm, 1.2 kg	350	180
	25 cm, 2.0 kg	350	190
	35 cm, 2.5 kg	500	280
	27 cm, 1.5 kg	450	250
	27 cm, 1 kg	300	
	27 cm, 800 g	150	
Bugatti (car)	32 cm, 2.2 kg	1200	700
Chopsticks	Pair		20
Elephant figurine	25 cm, 1.4 kg	450	280

Table 29: Range of retail prices of ivory items in Lubumbashi, DRC 2009

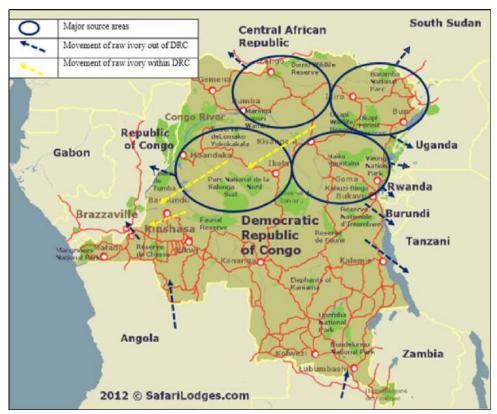


Figure 9: Major sources and movement of raw ivory in DRC during survey periods Source of map - https://www.safarilodges.com



3.5 Cameroon

Cameroon harbours both savannah and forest elephants, with the former found in northern Sahelian and Sudanian bio-geographical regions and the latter in southern forested parts of the country. Heavy poaching has taken a toll on the country's elephant population and the estimated number, based on population surveys that have occurred over the last ten years, is now 6,830 (±943), with another 1,985 to 2,134 elephants potentially found in unsurveyed parts of range in the country (Thouless *et al.*, 2016). The largest population appears to be found in and around Lobeke National Park in the southeast.

The first ivory market surveys in Cameroon took place between 15 and 24 April 2007 in Douala and Yaoundé, but Cameroon was not visited during the 2009 study. The timing of the 2007 survey was also not ideal as, in March 2007, the Ministry of Forests and Wildlife (MINFOF) carried out inspections in most markets, confiscating ivory items and registering vendors' identity details. It is therefore likely that the MINFOF inspection exerted impact on the outcome of the TRAFFIC study and most probably the figures described below would have been much different if the survey was carried out a few weeks earlier.

All the places visited during the 1999 survey in the Martin and Stiles report were revisited in 2007. In both Yaoundé and Douala, the ivory market was hardly visible and suspicion was high among the traders. Their extremely cautious attitude was probably the result of frequent enforcement actions by MINFOF, who was technically assisted by some NGOs.

A second survey in Cameroon was undertaken from 19 to 21 December 2014 in Yaoundé. Further survey work was carried out over an extended period of time and often combined with other missions. In this regard, Douala was visited in 2015 from 10 to 11 and 21 to 23 February, 21 to 22 and 30 to 31 March, 23 to 24 April, 1 to 2 May and 13 to 14 June, for a total of 16 days over a five-month period of time. Further, since TRAFFIC has permanent staff in Yaoundé, ivory market surveys are undertaken on a monthly basis.

Legislation and Policy

In Cameroon, domestic ivory trade is not prohibited. *Arrêté* No. 0050 of 22 September 2004 stipulates conditions under which one can obtain a permit to work ivory and/or trade in ivory and its products. However, this does not seem to be implemented. During the 2014 and 2015 surveys, none of the vendors had a permit and none had tried to apply for one. There are four instruments that make up the cornerstone of wildlife protection in Cameroon (Nkoke, 2012):

- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Law No. 94-01 of 20 January 1994 establishes forestry, wildlife and fisheries regulations.
- Decree No. 95-466-PM of 20 July 1995 establishes the conditions for the implementation of the wildlife regulations.
- Order No. 0565-ADFAP-SDF-SRC of 14 August 1998 provides the list of protected animals in three classes.

In Cameroon's legislation, animals are grouped into three classes (A, B and C) and are listed in Articles 2, 3 and 4 of the Order of 18 December 2006. According to section 78, animal species in class A are totally protected and may on no occasion be killed except as provided for in Sections 82 and 83 of the law. However, their capture or holding in captivity shall be subject to authorization by the service in charge of wildlife. Section 101 of the 1994 wildlife law states that "any person found, at any time or any place, in possession of a whole or part of a live or dead class A or B protected animal, as defined in Section 78 of the present law, shall be considered to have captured or killed the animal." Elephants with tusks less than 5 kg are recognized as Class A specimens, whilst those with tusks from 5 kg and above are considered Class B specimens. Traders, therefore, use this legal loophole to insist that their

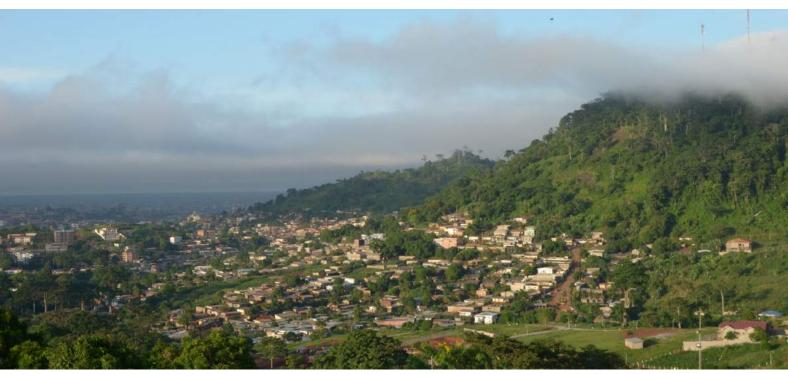
"Since TRAFFIC has permanent staff in Yaoundé, ivory market surveys are undertaken on a monthly basis."

ivory pieces are above 5 kg because lesser penalties are imposed. The species of class B shall be protected and may be hunted, captured or killed subject to a grant of a hunting permit. The species of class C shall be partially protected; their capture or killing shall be regulated by conditions laid down by order of the Minister in charge of wildlife.

Generally, wildlife law enforcement in Cameroon falls under the auspices of the Ministry of Forestry and Wildlife (MINFOF). MINFOF is assisted by other government enforcement agencies such as the police, gendarmerie and Customs, as well as NGOs, including the Last Great Ape Organization (LAGA), WWF, the Zoological Society of London (ZSL) and TRAFFIC. Collaboration between these actors at both the national and international level (involving the international police organization - INTERPOL) has resulted in investigations and/or arrests and prosecution of many ivory traffickers. One example of collaboration relates to the 3,900 kg of ivory seized in Hong Kong in 2006 which originated

from Cameroon hidden in a false compartment of a container. Through the collaboration of the Customs officials and the CITES Management Authorities of both countries, supported by other law enforcement agencies in Cameroon (police and gendarmerie), the traffickers were quickly identified and the case sent to the court in Cameroon. The traffickers, identified as Chinese, fled the country before they could be arrested and are now probably operating out of Nigeria, where they were prior to moving to Douala.

In spite of many challenges, such as insufficient capacity in MINFOF, low collaboration with other State agencies and corruption, about 90% of the arrests end up in court with some successful prosecutions. The porosity of the Cameroon borders with other countries is also a cause of poaching and illegal wildlife trafficking as witnessed in the killing of elephants in the Bouba Ndjidda National Park, where more than 200 elephants were reportedly killed in 2012, allegedly by a Janjaweed armed group crossing Chad and CAR to Cameroon from Sudan. Enforcement agencies such as the police also carry out arrests but then hand over the cases to MINFOF for follow-up given that this is their prerogative. The TRAFFIC Investigator for the 2014/2015 surveys was part of a team that assisted in the legal procedure of some arrest cases carried out by the police. In September 2009, a network of international ivory traffickers was busted in Douala by the Littoral Regional Delegation for National Security, with two members of the network arrested with a huge consignment of raw ivory totaling 1,000 kg



TRAFFIC report: Ivory Markets In Central Africa

and representing more than 150 killed elephants. In March 2014, the judicial police arrested an international ivory trafficker with 36 tusks weighing over 170 kg. The ivory was about to be transported to Douala en route to Nigeria by sea.

The persons who have so far been arrested in Cameroon for violating wildlife law are of different nationalities and professions. Apart from Cameroonian citizens, they include nationals of Chad, China, Congo, Côte d'Ivoire, Egypt, Gabon, Guinea (Conakry), Mali, Nigeria and Senegal. Represented among these individuals are military or law enforcement officers; municipal, administrative or judiciary officials; business people; journalists; students; transporters; and hotel workers; amongst others.

Government-held Ivory Stockpile

The central storage facility for Cameroon's ivory stockpile is within the premises of the Mvog Betsi Zoo in Yaoundé. Out of Yaoundé, they are stored in MINFOF Delegations, Court premises, Police, Gendarme and Customs structures. The quantity of national ivory could not be obtained in the 2007 survey. In the 2015 survey, however, Cameroon officials estimated the national ivory stock to be more than 5,000 kg. Although all ivory is supposed to be conveyed to Yaoundé after seizure by MINFOF and other law enforcement agencies within the national territory, it can take a very long time, even years, for the transfer actually to occur. Ivory is generally kept within court premises as evidence until cases are concluded. Recently WWF and TRAFFIC have been supporting MINFOF to collect ivory from regional MINFOF offices and from courts so that it can become part of the central storage facility in Yaoundé. So far, 565.7 kg of ivory, composed of 340 full elephant tusks and 186 worked ivory pieces, have been collected, marked and transported to Yaoundé from the south, east, Littoral and southwest regions through this collaboration. It is strongly believed that this stock was part of the ivory burnt by Cameroon in April 2016.

On 19 April 2016, Cameroon incinerated 3,500 kg of elephant tusks and 1,753 art objects made of ivory seized from traffickers over the years and centralized at the national stockpile facility in Yaoundé. The Minister of MINFOF, Ngole Philip Ngwese, stated that by ordering the destruction of the elephant

tusks, the President of the Republic, His Excellency, President Paul Biya sought to ensure that efforts to combat poaching and illegal trafficking would not be frustrated and that seized ivory would not find its way to the black market. Though MINFOF claimed to have carried out an internal inventory, it would have been necessary that an independent and comprehensive audit be conducted to ensure transparency, traceability and deter any potential "leakage" (TRAFFIC, 2016). For example, to date there is no information on the quantity of ivory still in the national stockpile or in other facilities outside of Yaoundé.

Although the central storage facility is supposed to be very secure, this does not appear to be the case. For example, in June 2013 in Douala, two ivory traffickers, who were also owners of an artefacts shop, were arrested with 18 elephant tusks and 16 worked ivory pieces. Among the 18 tusks were marked specimens that had been previously seized in September 2009 in Douala and stored in the central stock facility in Yaoundé (Anon 2013, LAGA Annual Report, 2013). Following investigations, it was determined that the then MINFOF Conservator in charge of the Mvog Betsi Zoo at the time was an accomplice in the leakage that enabled ivory from the national stock to be sold back to traffickers. This MINFOF official was arrested and, in an unprecedented and exceptional move in July 2013, his case, the first of its kind concerning a wildlife matter, was forwarded to the Special Criminal Court by the Cameroon government, intensifying the fight against wildlife trafficking in the country. This special court prosecutes cases of embezzlement and corruption valued at more than FCFA50 million (about USD100,000) (Anon 2013, LAGA Annual Report, 2013). The case is still ongoing in the court and additional security measures have been put in place at the Yaoundé central ivory storage facility to prevent future theft.

3.5.1 Douala

Retail Outlets and Prices for Worked Ivory

In June, July and November 1999, Douala's ivory markets were comprehensively surveyed and 21 retail outlets and at least seven ivory carving workshops were observed selling 4,891 ivory products, weighing an estimated 510 kg (Martin & Stiles, 2000). This result was far less than the more than 50 retail outlets

found selling an estimated 880 kg of ivory products a decade earlier (Allaway, 1989b).

Hotels and Shops

Some of the shops renowned for the sale of ivory products in 1999 had closed down by the time the 2007 survey was carried out, including Couleur exotique and l'Art Africain, two handicraft shops in Bonapriso and in Akwa, respectively. Other shops visited, such as the Ali Baba shop at Akwa, had no ivory on display. As for hotels, no ivory was found in the Akwa Palace, Sawa Hotel and Ibis Hotel. However, a stall opposite the Ibis Hotel was found to be selling three 2 cm wide bracelets. At the same location, another vendor offered a pair of tusks, of about 15 kg each, for FCFA16,500/ kg (USD34/kg). He also indicated he had ivory items carved in Nigeria and a pair of 1.5 m long tusks. He later sent photos of the supposed old ivory items to the investigator. Using photographs of ivory items for sale is apparently commonly used by local vendors, thus avoiding the risk of keeping ivory in the city. In the Méridien Hotel, the jewellery shop exhibited three ivory and gold items (a pair of earrings, necklace and bracelet) and 10 elephant hair bracelets with gold or silver.

During the 2015 survey, no ivory items were sighted in any of the hotels mentioned above. In addition to these hotels, other hotels, including La Falaise Hotel, Bano Palace Hotel, Somatel and Serena Hotel, were visited but no ivory items were sighted. Moreover, no shops were identified selling any ivory products.

Markets

The Marché de l'artisanat, a craft market, is situated in the Bonapriso neighbourhood and offers around 80 stalls, of which seven were selling ivory items in 2007. The quantity of ivory on display was not insignificant, with about 30 items on sale with an estimated weight of 26 kg. Table 30 shows the items and prices found in this market.

Some of the vendors indicated that some of the ivory articles, if not sold in Douala, would be sent to Malabo in Equatorial Guinea where there was greater demand with Spaniards and Chinese as the main buyers.

The Marché de l'artisanat was visited on three different occasions in 2015. Out of the 27 stalls offering artefacts, none displayed ivory items and even discussions with some of the vendors did not lead to the observation of any ivory items. One of the sellers from northern Cameroon said he could supply worked ivory as long as the price was right, but he too refused to show any sample as evidence. However, when a LAGA investigator visited the same market, six 1 cm rings were shown by a vendor of the Bamoum ethnic group from the west region of Cameroon—a group known to be among the main ivory traffickers in countries such as Cameroon and Congo.

Because this market in Bonapriso is cramped, some vendors had decided to move to another smaller and unstructured market opposite the Chinese restaurant on the Avenue DeGaulle in Bonanjo, but none of these dealers displayed any ivory items when surveyed by TRAFFIC. However, a LAGA investigator was told that ivory products could be supplied if given enough time. This lays credence to the fact that although ivory items are not displayed openly, underground trade is still taking place albeit at a reduced rate. Another artisanal market located in an old colonial building adjacent to the appeal court in Bonanjo, which is directly opposite *Chanas Assurance*, was also

Item	Size / Description	Starting price in USD	Final Price in USD
Rhino figurine	20 cm, 900 g		313
Human bust	4 kg	2088	1879
Carved tusk	55 cm, 2 kg	835	
	30 cm, 20 cm (2), 35-40 cm, 2 kg total	1044	
Polished tusk	50 cm, 4 kg (pair)		939
Figurine	20 cm		271

Table 30: Range of retail prices of ivory items in market, Douala, Cameroon, 2007

visited in 2015. Similar to the other markets visited, no ivory items were displayed, but in-depth probing resulted in the same outcome, that is that vendors could supply ivory items on order.

Workshops and Ivory Carving

Six workshops were identified in Douala during the 2007 survey with three still carving ivory items. They were located around the same courtyard in Akwa, opposite the Mahima supermarket. About 73 items, weighing about 22 kg, were found in the workshops. Table 31 shows the number of carved pieces and their prices observed in these workshops in 2007.

All craftsmen complained about frequent regulatory control from the authorities and the lack of a regular ivory supply. The law enforcement actions of the authorities had reduced ivory supply from southeastern Cameroon, one of the major sources of raw ivory. As a result, the price for raw ivory had increased making it expensive for carvers to obtain raw material. Although most carvers and vendors indicated they were Cameroonians, investigations showed that many were actually originally from Ivory Coast, Guinea and Senegal. During one of the

"Although ivory items are not displayed openly, underground trade is still taking place."

visits, three Chinese were found bargaining prices for chopsticks and larger ivory items. During the 2014/2015 survey, no open workshops were located in Douala. Those opposite the Mahima supermarket in Akwa were visited but out of the six seen in 2007, only two were still functioning but focusing on carving wood items. The researcher discovered that one of the carvers had simply moved the ivory carving part of his business to his house in the Bonamoussadi neighbourhood and his workshop was an office to get orders from his customers. In May 2011, however, this workshop owner was arrested along with his carver from Guinea (Conakry) with 34 kg of 364 worked ivory items, according to an investigator who worked for LAGA at the time. Among the ivory pieces found were bracelets, carved lions and rhinos, female busts, hankos, paperknives, hairpins and combs.

Item	Size / Description	Starting price in USD	Final Price in USD
Lion figurine	10 cm		63
	18 cm, 400 g 20 cm, 700 g		94 209
Carved tusks	6 kg (pair)		939
Hippo figurine	10 cm		63
Rhino figurine	800 g 650 g 20 cm		136 94 313
Animal figurine	25 cm (x2)		52
Bracelets	Thin (1.2 cm) Wider (2 cm)		4 10
Human busts (5)	800 g each		167
Chopsticks	Pair		13
Necklaces	Each		10
Figurines	10 cm		104
	13 cm		157
	30 cm (x2)		167

Table 31: Range of retail prices of ivory items in workshops, Douala, Cameroon, 2007

3.5.2 Yaoundé

Retail Outlets and Prices for Worked Ivory

A survey of Yaounde's ivory market in July 1999 found 1,124 ivory items, weighing an estimated 144 kg in some 15 retail outlets (Martin & Stiles, 2000). An earlier ivory market survey in 1989 found about 20 retail outlets selling an estimated 610 kg of ivory products (Allaway, 1989b), indicating a significant reduction in the decade since the international ivory trade ban under CITES had been agreed.

Hotels and Shops

No ivory was found in the shops of the Hilton Hotel or the Mont Fébé Hotel in the 2007 or 2014/2015 surveys. Ivory items were, however, found in some shops in 2007 as shown in Table 32.

The shops above were revisited during the 2014/2015 surveys. Eleven wood carvings were found in *Maison Rose* and the shopkeeper indicated that they were practically out of business because of frequent government harassment, difficulties in obtaining raw ivory and poor demand for ivory items. *Mara Art*, that was initially directly opposite *Maison Rose*, was said to have been relocated to the artifact centre at the Tsinga neighbourhood opposite the Government High School.

Market

In the 2007 survey, very few items were found in the main artefact market known as *Marché de l'artisanat* at Avenue Kennedy. Ivory items and their corresponding prices found in the market and shops are shown in Table 33. This artisanal centre was later moved to the Tsinga neighbourhood and no ivory items were seen there in 2014 or 2015. A modern structure has since been built at the original location on Avenue Kennedy, signifying that the market will be moved back there in the near future.

Workshops and Ivory Carving

The *Maison Rose* shop in Briquetterie was supported by the output of a workshop belonging to the same owner (a Senegalese). The small, but well-equipped place, was situated in the same block, in a very narrow corridor between houses. Four people were working in the shop during the visit in 2007. However, only one was working on ivory, carving six eggs, approximately weighing 0.250 kg each, out of a small tusk. All of the carvers were Cameroonians. The vendor explained they could get raw ivory if needed, but supply was not regular. At that time, he had a pair of tusks reportedly weighing 32 kg. The price for this large pair of tusks was not calculated on the basis of weight, but rather on the grounds that it was an item of exceptional size. Questioned about trade controls, the vendor confirmed that he had been put in jail three years earlier after being prosecuted for ivory trade. According to him, there were other carvers working in the Briquetterie quarter, but they remained more discrete. This workshop could not be located during the 2014/2015 survey because it was said to have gone underground. As observed in Douala, most ivory carvers now prefer to work from the relative safety of their homes reserving the visibility of the workshops to wood carving.

Source and Prices for Raw Ivory

In 2007, the vendors encountered during the survey reported that a good quantity of raw ivory available in Cameroon originated from Gabon, which aligns with information from other informants in Libreville who mentioned major movements of ivory from Gabon to Cameroon. According to the WWF office in Libreville, poachers from Djoum in Cameroon hunt elephants in the Minkébé National Park because access to this park is easier from the north which forms the border with Cameroon. Raw ivory is reportedly also entering Cameroon by truck at the main border post north of Oyem. Craftsmen who visited in the workshops in Douala also reported that ivory was supplied by people from CAR, Congo and from Yokadouma in eastern Cameroon. Most of them hide the pieces of raw ivory in their luggage.

Southeastern Cameroon was also mentioned during the survey as a major source of raw ivory. Elephant poaching was said to be very high in and around Lobeke National Park. Informants indicated that Muslim middlemen, living in neighbouring villages, often armed poachers and stocked the collected tusks underground in forest hideouts until they had a sufficient number (about 100 kg). According to the same source, the accumulated stock is transported to Douala and/or Yaoundé on logging trucks. In early March 2007, the principal investigator travelled from Yokadouma to Douala in a car transporting

Hotel / Shop	Ivory Items	First Price (USD)	Final Price (USD)	Comments		
Charpe Group	Carved tusk (pair, 2 kg)	-	-	Shop said to had displayed more		
(100 m from Hotel Tango)	Other carved pieces (750 g)	-	-	items a few years before		
Maison Rose	Letter openers (15 pieces)	-	-	Estimated total weight of items was		
(Briquetterie	Crocodile (30 cm)	167	-	5 kg		
Neighbourhood)	Bracelets, necklaces, animal figurines, etc.	-	-			
Mara Art	Jesus Christ 25 cm	-	-	A total of about 70 items weighing		
	Crowned Virgin Mary (35 cm, 4.5 kg)	1,044		about 20 kg		
	Virgin Mary (3 kg)	-	-	The shop owner explained that		
	Bishop's stick (1.7 m, 6 kg made of several ivory pieces	-	-	he was regularly working for the Baptist Church in Yaoundé; and		
	Egyptian obelisque (25 cm)	-	-	that Chinese were good customers		
	Bracelets (10 pieces, 1 cm)	15	13			
	Traditional mask from Benin (15 cm)		-			
	Chopsticks (24 pairs)	13	-			
	Name seals (8 pieces)	13	-			
Senegalese shop (behind Pharmacie du Verset)	Ivory profiles (10 pieces)	-	-	About 500 g in total		

Table 32: Items and range of retail prices in shops, Yaoundé, Cameroon, 2007

Item	Size / Description	Starting price in	Final Price in USD
		USD	
Crocodile figurine	30 cm	167	
Virgin Mary statue	35 cm, 4.5 kg	1044	
Bracelets (10)	1 cm wide	15	13
	Wider (2 cm)	104 for 10	
Chopsticks	24 pairs		13 - 15
Name seals (8)	5 cm		13
Carved tusks	750 g	251	125
	17 cm (pair of warriors)	1253	

Table 33: Range of retail prices of ivory items, Yaoundé, Cameroon, 2007 USD1 = FCFA479 in 2007

City	Year	< 5 kg (USD)	> 5 kg (USD)
Douala	2007	73	115
	2015	284	406
Yaoundé	2007	52	63
	2015	262	390

Table 34: Prices of raw ivory in 2007 and 2015 in Yaoundé and Douala

On average, prices in 2015 had increased about five times compared to 2007, with prices higher in Douala than in Yaoundé.

fresh bushmeat, but the car was never stopped by the authorities at any of the checkpoints.

Other sources of ivory mentioned included CAR and, indeed, officials in Bangui reported that trucks going to Cameroon often transport raw ivory hidden among their other cargo. They also indicated that ivory from elephants poached in the Dzanga Sangha area in the CAR was transported through Yokadouma to Cameroon. Officials in Brazzaville confirmed that raw ivory coming from northern Congo followed the same route.

As in 2007, the 2014/2015 surveys confirmed that the sources of raw ivory were both internal and external. Information from other investigators, MINFOF officials, NGOs and field visits confirmed that most raw ivory was from the eastern and southern regions of Cameroon with a little from the southwestern region as well. Raw ivory was also reported to come from as far as Gabon, Congo and CAR. Some of the

ivory is sold in Cameroon mainly in Yaoundé and Douala and some is transited to Nigeria and even as far as Togo and Dakar, Senegal.

During a targeted mission by TRAFFIC in August 2015 to investigate ivory trafficking between northern Congo (the Souanke area) and southeastern Cameroon (the Mbalam – Ntam areas), some of the actors and methods used in the transportation of raw ivory were identified and include:

- Local carriers—these are mostly the Baka people who transport ivory from the Congo side of the forest into Cameroon on foot. These tribes are used because of their knowledge of the forest. Since there are no control points in the forest, this method is very safe and effective to transport ivory and other illegal goods like minerals that derive from illicit mining.
- Motor bikes—these are the most common means of transport between Cameroon and

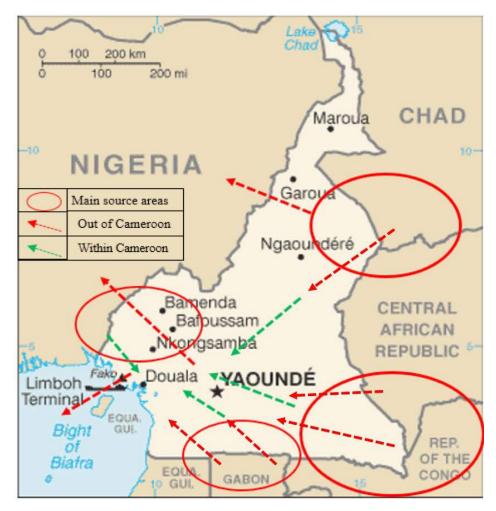


Figure 10: Major sources and movement of raw ivory in and out of Cameroon. Source of map: https://www.cia.gov/library/publications/the-world-factbook/geos/cm.html

Congo and traffickers commonly use them for ivory transportation. Bikes can avoid controls because they are able to use roads not accessible to vehicles where wildlife and other enforcement officials often mount road control points.

- by businesses to transport goods between Cameroon and Congo and traffickers often use them for their own illegal purposes. Most of these vehicles are owned by Cameroonians based in Sounake. Transportation is risky, however, since they often use roads where there can be wildlife and other enforcement officials. Ivory transported by vehicles is concealed by hiding tusks and pieces under chairs, car doors, car tires or in the bags of passengers. The transporters are often prepared to bribe officials if the tusks are discovered during inspections.
- Personal and government vehicles—Personal and administrative vehicles are also used to transport ivory. These are personal and/or official vehicles of government authorities that are not supposed to be controlled by wildlife and other enforcement officials, except infrequently when there are orders from above following a security tip off. These also include military and very senior government official vehicles probably involved in the trade. This is considered to be the safest method of transporting ivory.
- **Business and logging trucks**—These trucks, which are meant to supply goods to remote areas

- and convey logs from the heart of the forest to collection/holding sites or export locations, also serve to transport ivory on occasion. In view of the fact that they often pass through control channels, considerable effort is made to conceal any ivory and the drivers are also ready to bribe their way out if ever they are caught.
- According to a number of sources, foreigners, especially Chinese working with some timber companies, were also identified as being involved in ivory trafficking. This particular company has operations both in Congo and Cameroon, with their headquarters in Cabosse, Congo. The logging vehicles from this company are able to transport ivory as far as Douala.

The poaching of elephants and transportation of the ivory takes place in a number of stages as indicated in Figure 11. It takes time to collect enough ivory at the source, which is typically Souanke in Congo, Ntam in Cameroon and other surrounding forested areas. There are a number of collection points with the principle one being point 1 at Ntam. Ivory here is complemented by ivory collected from the other points indicated in Figure 11, for example Djoum and Sangmelima, which are both on the road to Douala.

On average, prices in 2015 had increased about five times compared to 2007, with prices higher in Douala than in Yaoundé.

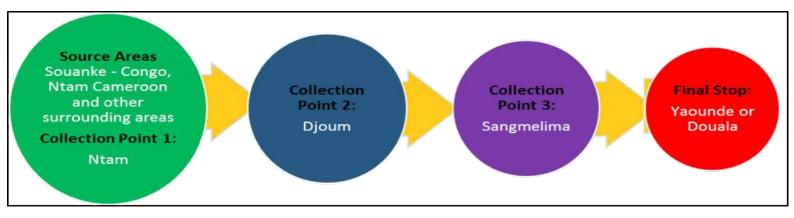


Figure 11: Movement of raw elephant tusks between Congo (Sounake) and Cameroon



4. DISCUSSION

This study was aimed at quantifying the number and type of ivory items on sale in the major ivory markets in Central Africa. It followed the same basic methodology used in 1999 by Esmond Martin and Daniel Stiles in their seminal report "The Ivory Markets of Africa." The TRAFFIC effort surveyed and recorded the number of retail outlets and carving workshops selling ivory products; collected information on stockpiles, sources and prices of raw ivory; and commented on legislation, the profile of traffickers, trade routes and other ivory trade dynamics. The purpose of this study, like the previous one, was to provide comparative statistics on the scale of ivory markets in Central Africa covering the periods 2007, 2009 and 2014/2015. Highlighting the status and trends in illegal domestic ivory trade throughout this period has fostered deeper understanding of changes in supply and demand over time. These assessments have not only allowed for the ivory trade situation to be tracked and updated periodically, but they have also supported decision making to ensure that effective controls are in place and being implemented to benefit elephant conservation throughout Central Africa.

The decision taken by the CITES Parties to instigate an oversight process based on the development and implementation of National Ivory Action Plans (NIAPs) was a direct response to a TRAFFIC analysis of ivory seizure data held in the Elephant Trade Information System (ETIS) prepared for CoP16 in Bangkok, March 2013 (https://www.cites.org/eng/cop/16/doc/index.php). In that report, those countries which were most heavily implicated in the illegal trade in ivory were prioritized into three categories: countries of "primary concern" which included eight Parties, countries of 'secondary concern' which included eight Parties, and countries of 'importance to watch' which included six Parties (https://www.cites.org/eng/niaps).

In Central Africa, Cameroon, Congo, DRC and Gabon were all identified as countries of "secondary concern." Consequently, through a decision taken at CoP16, the CITES Secretariat was requested to contact these Parties and "seek clarification on the implementation of CITES provisions concerning control of trade in elephant ivory and ivory markets" by the 65th meeting of the CITES Standing Committee (SC65). At that meeting, held in July

2014, another decision was adopted that called upon all of these countries to develop NIAPs by 31 October 2014, and to submit reports on any progress made by May 2015. Each country's NIAP was mandated to address a series of issues that might give rise to illegal trade in ivory and to provide milestones and clear time frames in terms of implementation. At the same time, Nigeria and Angola were also asked to develop NIAPs. This was an important related development as both of these nations border Central Africa (Nigeria to the west and Angola to the south), both host major domestic ivory markets that are primarily sourced from the sub-region, and both are engaged in significant export of raw and worked ivory to Asia (Milliken et al., 2012; 2016; Martin & Vigne, 2013; Milliken et al., 2006). After a regional stocktaking workshop and exercise on the development of NIAPs in the Congo Basin that took place in Kinshasa, DRC in late 2015 (Nkoke, 2016), NIAPs are now on the table for each of the target countries. Collectively, the NIAP process under CITES could potentially produce positive results in terms of elephant conservation if properly implemented. However, considering that most of the ivory trade in Central Africa has gone underground, future ivory surveys will need to develop innovative methods to determine the real status and accurate trends behind the ivory trade in the sub-region.

4.1 Retail Sales of Ivory Items in Central Africa

Results of the 2014/2015 surveys indicated that, with the exception of the Bikeko market in Kinshasa where ivory was still openly displayed for sale in significant quantities, all other markets in the cities surveyed have declined appreciably or have moved underground beyond observation. Although a few ivory items were occasionally sighted during the 2014/2015 surveys, including a ring in Libreville, a chess piece and necklaces in Pointe Noire and some hair pins in Bangui, these ivory products were mostly dissimulated amongst other art products and were not overtly being marketed as ivory. Overall, these studies indicate a progressive decline in the quantity of worked ivory displayed for open sale in Central African markets.

Comparatively speaking, all of these markets were still active in 2007, albeit at reduced levels from surveys done in 1989 and 1999. Follow-on surveys

conducted in 2007 and 2009 produced evidence of further significant decline. By 2014/2015, the quantity of worked ivory displayed had practically disappeared in Douala, Yaoundé, Libreville, Brazzaville, Pointe Noire and Bangui. It is worth bearing in mind, however, that the lack of open display of ivory items does not necessarily imply that the ivory trade has been totally eradicated. In general, whilst the trade has significantly reduced, there is still some ongoing underground and/or black market trade, which is facilitated by small, well-organized and trusted networks servicing a clientele that places orders directly. However, the situation and potential changes in the DRC for the other cities aside from Kinshasa surveyed earlier (Kisangani, Goma, Bukavu and Lubumbashi) could not be assessed. Table 39 provides a summary of the approximate weight, number of ivory items and number of outlets selling ivory products in each city during these surveys. Table 35 provides a summary of the approximate weight, number of ivory items and number of outlets selling ivory products in each city during these surveys.

The issue of Kinshasa's persistent ivory market stood in stark contrast to the general trend observed elsewhere in the subregion as of 2015. As stated, the number of outlets with ivory, as well as the number of ivory items and their weight in kg, has steadily decreased in all other cities examined as shown in Table 39. Looking at the aggregated data for each survey in Table 40 and Figure 12, overall, Kinshasa, DRC has accounted for 68% of the total weight of the ivory products observed, 78% of total number of items seen and 38% of the total number of outlets selling ivory in Central Africa over the entire survey period.

It is worth noting that when just the latest snapshot of the trade is considered, the 2014/2015 data, Kinshasa accounted for nearly 100% of the remaining ivory trade in the sub-region. At the same time, there is a long history of Kinshasa-produced ivory products being extensively marketed in Luanda, Angola. A 2006 survey of Luanda's largest ivory market, the Mercado do Artesanato in the Benfica suburb, found that "most traders who identified their origins said they came from the DRC", as well as most of the high-value ivory products they were trading (Milliken et al., 2006). Kinshasa's Bikeko market remains the largest unregulated ivory market in all of Central Africa, whilst DRC-produced ivory products are also exported to neighbouring countries such as Congo or Angola for local sale. There is little doubt that Kinshasa's ivory industry is maintained with the sanction and complicity of local government authorities who regularly fail to implement CITES requirements for commercial trade in ivory at the domestic and international level. It is recognized that this long standing state of affairs stands behind far reaching consequences and negative impacts on elephant conservation throughout the entire sub-region.

"These assessments have not only allowed for the ivory trade situation to be tracked and updated periodically, but they have also supported decision making to ensure that effective controls are in place and being implemented."



Place / Year	Cameroo	n	CAR	Congo		DRC					Gabon
	Douala	Yaoundé	Bangui	Brazzaville	Pointe Noire	Kinshasa	Kisangani	Goma	Bukavu	Lubumbashi	Libreville
1999*	510 kg, 4,891 items 28 outlets	144 kg, 1,124 items in 15 outlets	211 kg, 2,219 items in 29 outlets	N/A	N/A	486 kg, 4,324 items in 41 outlets	N/A	N/A	N/A	N/A	48 kg, 462 items in 8 outlets
2007	$\sim 45 \text{ kg}$ for ~ 110 items in 12 outlets	~ 70 kg for 100 items in 6 outlets	~ 52 kg for 358 items in 8 outlets	~ 62 kg for ~ 433 items in 8 outlets	N/A	~ 580 kg for ~ 3,211 items in 34 outlets	N/A	N/A	N/A	N/A	~ 162 kg for > 510 items in 25 outlets
2009	N/A	N/A	~ 12 kg for 62 items in 10 outlets	Less than 1 kg for > 20 items in 5 outlets	~ 74 kg for > 240 items in 12 outlets	~ 375 kg for ~ 2,660 items in 26 outlets	Over 10 kg for > 50 items in 6 outlets	~ 9 kg for 20 items in 5 outlets	~ 10 kg for 88 items in 7 outlets	~ 47 kg for ~ 221 items in 24 outlets	~ 96 kg ~ 626 items in 24 outlets
2014	N/A	No ivory item displayed	N/A	No ivory item displayed	< 500 g for 3 items in 1 outlet	N/A	N/A	N/A	N/A	N/A	N/A
2015	No ivory item displayed	No ivory item displayed	<500 g for 2 items in 1 outlet	N/A	N/A	> 400 kg for over 4,250 items in 32 outlets	N/A	N/A	N/A	N/A	No ivory displayed – ~10 g for 1 item in 1 outlet

Table 35: Total weight (kg) and type of ivory recorded during the respective surveys

Note that "outlets" here means all of the places selling ivory items including shops, markets and workshops. The estimate gives a general idea and is not exact in all instances. N/A means "not applicable" as no surveys were conducted the year in question.

Year	Number of Outlets	Number of Ivory Items	Weight of Ivory Items		
2007	93	4,722	971		
2009	119	3,987	634		
2014/2015	32	4,255	401		
Total Central Africa	244	12,964	2,006		
Total Kinshasa – DRC	92	10,121	1,355		
2014/2015 Kinshasa, DRC	32	4,250	400		

Table 36: Estimated total of number of outlets, ivory items and quantity in weight sold over the years

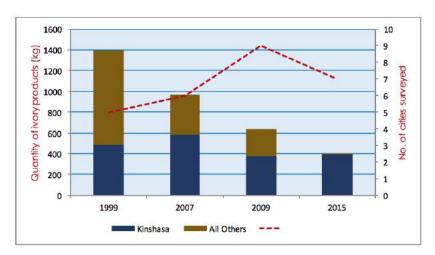


Figure 12: Kinshasa portion contrasted against total quantity (kg) of ivory observed during successive ivory market surveys in Central Africa

"These studies indicate a progressive decline in the quantity of worked ivory displayed for open sale in Central African markets."

4.2 Carving Workshops

Like retail outlets selling ivory products, the number of ivory carving workshops has also decreased significantly over time, with most reverting to the use of other materials, especially wood, for the purpose of carving. Carvers who persist in working with ivory tusks have generally moved such work out of sight and into their homes, using their shops and offices only to receive orders from clients. Reasons given for the decline and closure of many workshops included increased and frequent enforcement actions, scarcity of raw tusks and a low clientele base. Aesthetic preference was another issue cited. It was reported in Gabon, for example, that the worked ivory market remained small compared to sales of raw ivory tusks mainly because worked ivory items produced in Asia have more complex designs and hold higher quality as finished products than the types of products made in Africa. For this reason, many Asian buyers prefer to purchase raw ivory to take to Asia instead of buying already finished African-produced items. This may be a factor in other markets too. With the paucity of local clientele, a decline in European and North American buyers, and Asian buyers becoming more selective over time, poor patronage of local ivory carving industries has obliged many ivory workshops to close business.

At the same time there are reports that expatriaterun carving operations for export have developed in recent years. It was reported that Chinese operatives in Congo, who formerly were just engaged in raw ivory trafficking to Asia, have set up ivory carving operations themselves and regularly export small quantities of worked ivory items as opposed to the export of large consignments of raw ivory as was the case in the recent past. This was being done, it was suggested, to minimize financial losses from seizures of large raw ivory shipments. It was explained that Chinese networks were able to undertake holistic operations that included obtaining ivory from source locations, transporting such ivory to carving

sites, running processing operations using Asian carvers, and exporting the ivory products to Asian markets. The extent of vertical integration from source to export has considerably reduced the involvement of local carvers and served to displace Africa's native ivory carving industry. Whilst it needs to be appreciated that no Asian-run ivory carving operations were actually visited during any of the surveys TRAFFIC conducted in Central Africa, informants claimed that such operations were occurring in Congo. Recent ivory seizure data seem to support this notion to some extent. For example, the ETIS data show that, in three separate incidents in 2014 and 2015, Hong Kong Customs seized 77 kg of worked ivory products being transported by Chinese nationals from Congo to China (L. Sangalakula, ETIS Database Manager, pers. comm., 22 December 2015). These shipments of commercial quantities of ivory, ranging from 20 kg to 34 kg each, were all detected in carry-on suitcases and, in one case, the products had been dyed brown and were claimed to be Saussurea costus, a medicinal plant from the thistle family. Although it remains unknown if these ivory products, mostly bangles, chopsticks and name seals, were produced in workshops run by Chinese in Africa, these seizures confirm that ivory processing for export of products popular in Chinese markets could be an emerging factor in the trade. Thus, whilst local physical markets have contracted or disappeared in Central Africa, some degree of processing for export is still probably occurring and may even be increasing.

4.3 Profile of Buyers

The 2007 and 2009 surveys indicated that there was a mix of African and non-African ivory customers, including Cameroonians, Guineans, Nigerians and Senegalese in the trade, as well as Chinese, French, Italians, Japanese, Koreans, Lebanese, Malaysians, Portuguese, Spaniards, Russians and US Americans. The 2015 surveys found that more than 80% of the non-African buyers were Asians, especially Chinese but also Malaysians and Vietnamese. Interestingly, Pakistanis, Russians and Ukrainians were also mentioned in DRC and Turks were identified as being increasingly involved in the ivory market in CAR. On the other hand, the percentage of Europeans in the trade has become almost negligible. African buyers, however, seemed to function mainly as middlemen buyers with Asian nationals as their final clients.

It is worth noting changes in the ivory-buying

clientele in the sub-region over time. In 1999, Martin and Stiles found the Chinese to be secondary buyers and only interested in small quantities of ivory, whilst the main buyers at the time were southern Europeans (Italians, Portuguese and Spaniards) and South Koreans (Martin & Stiles, 2000). Ten years later, the situation has completely reversed with Chinese buyers in the paramount position, whilst ivory sales to European buyers has become almost negligible. This is not a surprising development given that China is the main ivory market globally and the presence of Chinese nationals in Africa has never been greater.

4.4 Other Actors in the Ivory Trade

The involvement of high-ranking administrative, military and judiciary officials from Central African countries in the ivory trade has been reported in all of the countries studied. This involvement is either direct through the provision of arms and ammunition to poachers for the acquisition of ivory, assistance to middlemen in the transport of elephant tusks along the trade routes to collection centres, ports of export or markets, or collusion with traffickers to evade law enforcement actions or avoid judicial punishments. In terms of indirect involvement, government authorities at all levels may willingly accept bribes in exchange for facilitation of some aspect of illegal trade in ivory. Some of these include rangers and/or law enforcement officials failing to arrest poachers or traffickers at source areas, hubs or road blocks; wildlife and other enforcement officials failing to send arrested suspects to courts; court officials failing to judge according to the laid down laws or simply releasing suspects who abscond; government officials using their vehicles to transport ivory tusks etc.

Another very worrying factor is the presence of armed groups and rebels, in parts of the region who, on occasion, undertake mass slaughter of elephants. During this study such activity plagued CAR, where armed Sudanese and Chadian poachers have repeatedly entered the country in groups of 60 to 100 to kill elephants, and Séléka rebels raided the national ivory stockpile in Bangui. Likewise, LRA, FDLR and FARDC armed militia have ravaged parts of eastern and northern DRC for years, killing wildlife for bushmeat and trafficking in ivory. In Cameroon,

"The involvement of highranking administrative, military and judiciary officials from Central African countries in the ivory trade has been reported in all of the countries studied."

Janjaweed armed groups entering the country after crossing CAR and/or Chad were reported to have killed more than 200 elephants in the Bouba Ndjidda National Park in the northeast in 2012 and more recently Boko Haram armed extremists from Nigeria temporarily occupied Waza National Park. These threatening incursions inevitably take elephant protection to the level of open warfare, at least in some parts of Central Africa. Being woefully outmanned and outgunned, field rangers in particular and wildlife authorities in general are defenceless against such sophisticated onslaughts.

4.5 Sources of Raw Ivory

Generally speaking, the sources of raw ivory have remained pretty much the same over time in all countries, with most stocks coming from national parks and protected areas that exhibit relatively high elephant densities. Additionally, they stem from ill-secured ivory stocks throughout the region. In addition to internal movements of raw tusks, there has also been frequent transboundary movement between countries in the sub-region and beyond. Ivory traders spoke of raw tusks being moved from the DRC to CAR and Congo, and movements of ivory from Congo, Gabon and CAR into Cameroon. Further, some of the ivory moving into Cameroon reportedly has ended up in Nigeria and Togo for export and, at times, even Senegal was mentioned as a final destination. Raw tusks are also transported from the DRC to Uganda, from the DRC and Congo to Angola and vice versa, and from CAR to Chad and Sudan. Finally, on one occasion, there was a report of ivory movement from Benin in West Africa to Congo. Figure 13 attempts to map these movements.

It is evident that trade patterns for raw tusks within and out of the sub-region are very complex and driven by many factors, but the largest quantity of ivory is destined for export to Asia, where the most profitable ivory trade lies. For example, forensic examination of five mega-seizures that collectively totaled over 13 tonnes of ivory, all of which was either seized in, or exported from, Lome, Togo in 2012 through 2014, found that 74% of the ivory was sourced in the Central African sub-region (Wasser *et al.*, 2015, Ziegler *et al.*, 2017). In this regard, 95% of this ivory apparently came from Gabon and Congo and the remaining 5% originated in Cameroon and DRC. Informants reported that the acquisition of raw ivory tusks sometimes involves people pursuing other activities such as artisanal mining or the transportation of logs but who move supplies of elephant tusks whenever opportunities arise.

4.6 Raw Ivory Prices

Reported prices for raw ivory collected during the TRAFFIC surveys was based on interactions with ivory carvers and retail sellers and were not otherwise verified in terms of actual transactions. As such, the data presented in Table 41 should be considered as indicative. To serve as a kind of baseline for assessing trends over time, comparative ivory price data from

Martin and Stiles (2000) is also given in Table 37. It can be seen that the cost of raw ivory has varied considerably between cities (even within countries) over time, and an increase in price is evident for every weight class in all locations in each successive survey.

These data show that the price per kg of raw ivory, as well as the rate of increase, has fairly consistently been greatest in Yaoundé and Kinshasa, whilst in Bangui and Brazzaville, the lowest prices per kg and lowest rate of increase has been noted. Comparative data for Douala, Pointe Noire and Libreville fall somewhere in the middle (Table 37). The greatest increase in raw ivory price was observed in Kinshasa, DRC between 2009 and 2014/2015 and is probably the result of high demand and limited supply owing to the shift to exportation through transnational ivory networks and syndicates with greater financial resources. This period of price increase coincides with a general increase in the involvement of Chinese and other Asian workers in development projects and resource exploitation activities centered upon mineral and timber extraction throughout the Central African sub-region.

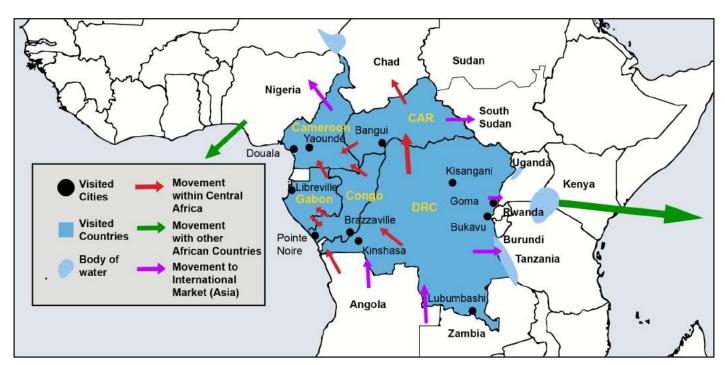


Figure 13: Movement of ivory within Central Africa and with other sub-regions

Country	Year and pri	Year and prices per kg in USD							
	City	1999*	1999*		2007		2009		
		<5 kg	>5 kg	<5 kg	>5 kg	<5 kg	>5 kg	<5 kg	>5 kg
Cameroon	Yaoundé	38	50	73	115	-	-	284	406
	Douala	27	50	52	63	-	-	262	390
CAR	Bangui	20	25	30	50	42	73	100	180
Congo	Pointe Noire	-	-	-	-	105	200	187	332
	Brazzaville	-	-	21	40	30	73	156	312
DRC	Kinshasa	30	50	50	85	120	170	400	600
Gabon	Libreville	30	42	30	50	44	85	120	260

Table 37: Raw ivory prices (USD) by tusk size in the different countries over the survey period

The raw data in Table 38 also clearly indicate that there is a consistent price differential between elephant tusks of different sizes, a finding that goes back to at least 1999. Looking at the percentage of the price differential for ivory in the two weight classes in Table 38, better quality ivory that is more than 5 kg in weight is from 21% (Douala, 2007) to 143% (Brazzaville, 2009) more expensive in price than ivory pieces that are less than 5 kg in size in each of the years examined. Overall, the median price differential is 67% and the mean is 69%.

It is assumed that the average price per kg of raw ivory at a country level can be established by taking the mean of the price range exhibited by the two weight classes and combining all of the data in instances where multiple cities were surveyed in the same country. This serves to generate a mean raw ivory price per country in each of the survey years as exhibited in Table 39. It is also possible to take the mean of these country-specific prices and establish a simple Central Africa mean price, also shown in Table 39.

However, taking a simple mean is based on the untenable assumption that each country was engaged in the exact same level of ivory trade in each year which is clearly not the case as some countries moved greater quantities of illicit ivory than others. To correct for this issue, it is possible to prorate the raw ivory price data for each country against the ETIS Transaction Index values for illegal trade in raw ivory. Based on analysis of the trade chains in ivory seizure data, the ETIS Transaction Index provides a relative comparative measure of the involvement of each country in illegal ivory trade in each year using the methodology described in Underwood et al. (2013). The ETIS Transaction Index, for example,

indicates that, in 2007, illegal ivory trade involving Cameroon was some ten times greater than the quantity of illegal ivory coming out of CAR, thus the weighted sub-regional price for raw ivory proportionally reflects this difference and accords more value to the price of ivory in Cameroon over CAR price data. Accordingly, in all years except 2014/2015, such a calculation makes the all-Central Africa price for raw ivory per kg greater than the simple mean value as ivory prices in countries with the most trade carry the greatest weight. Finally, for comparative purposes, ivory prices throughout the period examined need to be adjusted for inflation so that comparisons across all years are possible. For this purpose, the Consumer Price Index Inflation Calculator (https://www.bls.gov/data/inflation_ calculator.htm) was used to adjust the price data in all years to 2015 USD values. This produces a better basis for understanding underlying trends over time. These various calculations are described and presented in Table 39.

Using price data for the sub-region as a whole, which has been prorated against the ETIS Transaction Index and then adjusted for inflation to 2015 values, it is possible to elicit relative ivory trends over the period 1999 through 2015 by interpolating price values between years in which survey data are available as indicated in Figure 15. Accordingly, average prices for raw ivory remain fairly stable with only an incremental annual increase of just over 3% from 1999 through 2006. From 2007 through 2015, however, a rapid, sharp increase in price is noted. In this regard, the annual rate of increase in the period 2007 to 2009 was over 23%, and from 2009 through 2015 it was sustained at just under 16% each year. Thus, a period of major increase in ivory prices in this sub-region commenced in 2007, with raw ivory prices effectively doubling every four or five years thereafter.

^{*} Based on Martin & Stiles, 2000 to serve as a baseline.

Country	Price differentia	Price differential (%) between ivory < 5 kg and ivory > 5 kg by year							
	City	1999*	2007	2009	2014/2015				
Cameroon	Yaoundé	32%	58%	-	43%				
	Douala	85%	21%	-	49%				
CAR	Bangui	25%	67%	74%	80%				
Congo	Pointe Noire	-	-	90%	78%				
	Brazzaville	-	90%	143%	100%				
DRC	Kinshasa	67%	70%	42%	50%				
Gabon	Libreville	40%	67%	93%	117%				

Table 38: Percentage of ivory price increase of large ivory specimens (> 5 kg) over smaller ivory specimens (< 5 kg) in weight by country by year of survey

^{*} Based on Martin & Stiles, 2000 to serve as a baseline.

Country	Average ivory prices (U	SD) by country a	nd all-Central Af	rica	
	Type of Price	1999*	2007	2009	2014/2015
Cameroon	Raw data mean	41.25	75.75	-	335.50
CAR	Raw data mean	22.50	40.00	57.50	140.00
Congo	Raw data mean	-	30.50	102.00	246.75
DRC	Raw data mean	40.00	67.50	145.00	500.00
Gabon	Raw data mean	36.00	40.00	64.50	190.00
All-Central African Price	Raw data mean	34.94	50.75	92.25	282.45
All-Central African Price	prorated against ETIS Transaction Index by year	38.76	62.16	98.89	264.81
All-Central African Price	Prorated and adjusted for inflation at 2015 values	55.14	71.06	109.25	264.81

Table 39: Average raw ivory prices by country and for all-Central Africa based on ETIS Transaction Index and adjusted for inflation to 2015 USD values

^{*} Based on Martin & Stiles, 2000 to serve as a baseline.

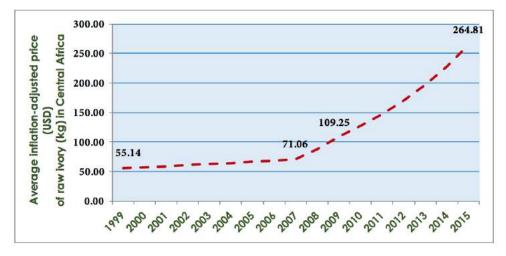


Figure 14: Trend in Central African raw ivory prices (USD) which are weighted against the ETIS Transaction Index and inflation-adjusted to 2015 values, 1999-2015

4.7 Legislation and Regulations

Policy and legislation in the different countries surveyed varied significantly with regards to wildlife protection and punishment for wildlife offenders and illegal ivory trade, in particular. The same can also be said for implementation and enforcement, which is often plagued by insufficient resources, corruption and lack of political will. In addition to national laws, all countries surveyed have ratified CITES, which subjects trade in elephant ivory to an international regulatory framework.

During the 2014/2015 survey, it was particularly observed that all countries were making laudable efforts towards enforcing wildlife laws with varying degrees of efficiency. In some countries, specialized units such as ANPN in Gabon, had been put in place to foster effective implementation of wildlife laws. It was generally observed that the application of wildlife laws in CAR, Cameroon, Congo and Gabon had driven the ivory trade underground or seemed to have completely halted trade in some places. In the DRC, recent changes in legislation have resulted in one of the highest penalties for wildlife crime in Central Africa being promulgated, but effective application of the new law is still outstanding, especially considering that the ivory market in Kinshasa remains the most vibrant and open ivory outlet in the sub-region.

There is also justification for closer harmonization of the wildlife laws in Central Africa in order to send a strong and consistent message to poachers and traffickers who clearly move throughout the highly porous sub-region. Unfortunately, different messaging is currently the case, producing perverse effects. For instance, as the laws in Congo are now more stringent in terms of imprisonment and function as a more effective deterrent to those in either Gabon or Cameroon, some ivory traffickers have indicated that they prefer to operate in Gabon or Cameroon because, if arrested, they will only face minimal penalties as compared to the situation in Congo. Table 40 presents a summary of the main wildlife trade legislation in the sub-region and their penal codes concerning infractions, as well as information concerning participation in CITES.

"All countries surveyed have ratified CITES, which subjects trade in elephant ivory to an international regulatory framework."

Country	Law	Punishment	CITES		
			Date of Joining	Date of Ratification	
Cameroon	Law No. 94/01 of 20 January 1994 to establish Forestry, Wildlife and Fisheries Regulations (under revision).	1 to 3 years imprisonment; fines of FCFA3,000,000 to FCFA10,000,000 (USD6,000 to USD20,000 at USD1 = FCFA500)	05/06/1981	03/09/1981	
CAR	Orders No. 85/005 of 30 January 1985, No 85/046 of 31 October 1985; Decree No 85/364, Ordinance No 81/013 of 23 November 1981, all prohibiting hunting of elephants and ivory trade.	3 months to 1 year imprisonment; fines of FCFA200,000 to FCFA1,000,000 (USD400 to USD2,000 at USD1 = FCFA500)	27/08/1980	25/11/1980	
Congo	Law No. 37/2008 of 28 November 2008 on wildlife and protected areas	2 to 5 years imprisonment; and fines of FCFA100,000 to FCFA5,000,000 (USD200 to USD10,000 at USD1 = FCFA500)	31/01/1983	01/05/1983	
DRC	Law No 82/002 of 28 May 1982 (revised). New Law: Law No 14/003 of 11 February 2014 covering the conservation of nature.	Article 78 - 1 to 10 years imprisonment and fines ranging between five and twenty million Congolese Francs (USD5,000 to USD20,000 at USD1 = FC1,000). Article 79, 5 to 10 years imprisonment and fines ranging from 25 million to 100 million Congolese Francs (USD25,000 – 100,000) for international trading in protected species.	20/07/1976	18/10/1976	
Gabon	Law No. 16/2001 of 31 December 2001 of the Forest Code and Wildlife Protection. Law under review.	3 months to 6 months imprisonment and fines of FCFA100,000 to FCFA10,000,000 (USD200 to USD20,000 at USD1=FCFA500).	13/02/1989	14/05/1989	

Table 40: National laws, penalties and dates of CITES accession

4.8 Ivory Stockpile Management

Data and information obtained concerning the status of national stockpiles in the five countries over the different survey years are presented in Table 41. It is challenging to determine the exact amount of ivory in national stockpiles in Central Africa because, generally speaking, record keeping is poor or absent altogether, there is very limited transparency or public reporting on the status of such stocks, and access to government owned stocks is highly restricted and involves protracted procedures for obtaining permission. In most cases during the TRAFFIC surveys, attempts to view national stockpiles were met by outright refusal by the authorities. Further, many national stockpiles are dispersed in multiple locations, some at great distance from national capitals and sometimes even in almost inaccessible places. As a result, most of the figures presented in Table 41 are estimates obtained from a combination of records and discussions with relevant officials and stakeholders, but they do not constitute official reports by the respective governments. These estimates should, therefore, be interpreted as indicative and not exact figures.

The figures and accompanying information in Table 41 give an idea of the quantity of ivory in national stockpiles at different points in time, but in many cases the comparative basis of the data at the national level is unclear or questionable. Still, these estimates indicate a general increase in the total quantity of ivory in national stockpiles in the sub-region over this

period, with the amount reported in 2015 basically double that which was reported eight years earlier in 2007. On the other hand, two countries actually show decreasing stockpiles in 2015, CAR and Gabon, but for the latter country this is understandable as Gabon incinerated some 4,800 kg of ivory in a public event in 2012. Congo also did the same by burning 4,700 kg of its national ivory stockpile in March 2015, but this event is not captured in the data presented in Table 41, which reflects the status of the stockpile prior to incineration. Likewise, Cameroon also burnt 2,268 kg in April 2016, so the stockpile reported in 2015 would have been reduced accordingly.

In any event, it is estimated that more than 31,000 kg of ivory was held in national ivory stockpiles in these five Central African countries in 2015. The issue of effective security for these holdings is an important matter. In most countries, insufficient mechanisms are in place to safeguard these ivory stocks, and the development of proper management and security systems are needed to ensure adequate protection. Persistent governance shortfalls and other issues such as poor storage facilities continue to provide avenues for illegal ivory trade based on stock losses. Instances of ivory leakage have been reported in Cameroon where in August 2013, a highly placed official in MINFOF was arrested in Yaoundé, accused of being implicated in the disappearance of more than 200 elephant tusks from the national stock, some were amongst the 18 elephant tusks seized in Douala in June 2013 (Anon 2013, LAGA Annual Report, 2013); and, in Bangui, CAR, where Séléka rebels reportedly

Year	Cameroon - Yaoundé	CAR - Bangui	Congo - Brazzaville	DRC - Kinshasa	Gabon - Libreville	Total Estimated
2007	No figure given	200 kg	2075 kg, including 1475 kg in Brazzaville; 600 kg in Sangha area	About 10,565 nationally, including 1317 worked pieces estimated at 65 kg	About 2,052 kg, including 442.2 kg of worked ivory	~14,892 kg
2009	No survey	More than 500 kg	About 3,000 kg in Brazzaville; elsewhere unknown	14,800 kg including 12,000 kg in Kinshasa, 2800 kg in Garamba NP	2739 kg, including 442.2 kg worked ivory and 87 kg raw ivory elsewhere	~21,039 kg
2015	More than 5,000 kg in Yaoundé; elsewhere unknown	22 kg (7 tusks) in Bayanga; elsewhere unknown	More than 5,000 kg in Brazzaville; elsewhere unknown	More than 20,000 kg in Kinshasa; elsewhere unknown	1,030 kg including 22 kg (7 tusks) and 8 kg (104 ivory pieces) in Libreville; about 1,000 kg elsewhere	~31,052 kg

Table 41: Quantity (kg) of ivory in national stock reported from surveyors over the survey period

looted 148 whole tusks and 108 ivory pieces in March 2013. In all countries in the sub-region, sound ivory stock management programmes need to be put in place which include regular inventory and auditing procedures so as to promote transparency, traceability and proper security of the stocks in both the centralized facilities in the capital cities, as well as in decentralized field stations where ivory may first come into possession of the authorities.

"It is estimated that more than 31,000 kg of ivory was held in national ivory stockpiles in these five Central African countries in 2015."

Although all countries have rudimentary ivory stockpile management systems in place, varying degrees of legal backstopping, implementation and efficiencies are noted. TRAFFIC undertook a basic audit of national ivory stockpiles in Central Africa and has found the following:

- At the present time, Gabon seems to be employing minimum standards developed by TRAFFIC to help guide ivory stockpile management (Ringuet & Lagrot, 2013). These efforts were undertaken with funding in the context of the European Union (EU)–CITES Capacity-building project, strengthening CITES implementation capacity of developing countries to ensure sustainable wildlife management and non-detrimental trade. Given the transport infrastructure challenges, one particular issue which Gabon faces is the lack of a national procedure for the transport of seized ivory in provincial locations to the centre storage facility in Libreville. The risk of ivory being stolen during transit to the capital city remains a
- The DRC ivory stockpile management system is perhaps the most primitive and, not surprising, the authorities do not know the precise amount of ivory in the national stockpile. During a visit to a high-ranking official in Kinshasa, worked ivory pieces could be seen littered around the office, which seemed to be a clear indication of

- lax management. The country's sheer size and crippling lack of transport infrastructure will strongly impede on any efforts for a centralized ivory storeroom. The absence of a unified policy for basic procedures and regular reporting at the provincial level, however, makes for a very confusing, largely uncontrollable, decentralized situation in a country of vast proportions.
- In Congo, ivory stockpile is currently managed by the Ministry of Forest Economy and Sustainable Development (MEFDD) with some assistance from NGOs, such as WCS and PALF. All ivory in the country is meant to be centralized in Brazzaville, but transport issues from other parts of the country to the capital city are not clearly resolved due to lack of clear mechanisms to transfer ivory from other places to Brazzaville immediately after seizures. Security issues are another problem and stock leakage in recent years has been noted.
- In Cameroon, order No. 03/D/MINFOF/SG/ DFAP/SDVEF/SC of 7 January 2014 outlines rules and procedures governing ivory stock management, as well as identifies those responsible for marking, labelling, recording and storing national ivory stocks. Unfortunately, dissemination of this information to those concerned has not been very effective and most field staff remain unaware of the order. Consequently, one still finds unmarked ivory stored in various divisional and regional offices of MINFOF throughout the country. The protection of ivory stockpiles in Cameroon at all levels, including courts, divisional and provincial delegations and even the central storage facility in Yaoundé, remains a concern as these storage facilities do not have adequate security measures in place.
- In CAR, currently there is no working system for stockpile management following the looting of stock rooms which occurred in 2015 by Séléka rebels. As indicated above, CAR used to auction national ivory stockpiles as a component of stockpile management, but the present status of such provisions needs reconsideration.

Cameroon, Congo, DRC and Gabon are all currently implementing National Ivory Action Plans (NIAPs) at the behest of CITES, with the improvement of ivory stock management included as an articulated goal in every plan. CAR has not been identified as

a priority for NIAPs. TRAFFIC and WWF have supported the development of NIAPs in the subregion and are now supporting its implementation in Cameroon and the DRC. In Cameroon, for example, this entails promoting awareness for the poorly understood national law that outlines protocols and procedures for ivory stock management. In the DRC, discussions are ongoing between the DRC government, TRAFFIC, WWF and other partners including GIZ, to launch a project that would result in a comprehensive nationwide ivory stock inventory for the first time.

Cameroon, Congo and Gabon have destroyed some part of their national ivory stocks, noting a desire to put them out of reach of traffickers and to demonstrate commitment towards fighting wildlife crime. Ivory stock destruction is the prerogative of any country as a management option, but it needs to be considered as one component within the context of a broader, comprehensive ivory stock management policy. Whilst destruction temporarily eliminates ivory stock, it does not prevent future accumulation that is sure to occur in any elephant range State. Thus, the necessity of having a robust ivory stock management system in place remains an important consideration. TRAFFIC plans to promote the use of a generic ivory stockpile management framework from which effective national ivory stockpile management systems can be developed in Central Africa.

The importance of having operative best-practice ivory stock management systems is increasingly being recognized at the international policy level. Since CITES CoP16, the Parties agreed that reporting of ivory stocks in the hands of government authorities should occur on an annual basis. Resolution Conf. 10.10 (Rev. CoP16) was amended to mandate that all Parties:

"maintain an inventory of government-held stockpiles of ivory and, where possible, of significant privately held stockpiles of ivory within their territory, and inform the Secretariat of the level of this stock each year before 28 February, indicating: the number of pieces and their weight per type of ivory (raw or worked); for relevant pieces, and if marked, their markings in accordance with the provisions of this Resolution; the source of the ivory; and the reasons for any significant changes in the stockpile compared to the preceding year."

This directive took effect in mid-2013, but since then, of the five target countries, only Congo and Gabon have submitted data to the CITES Secretariat on the status of their ivory stocks. Looking forward, those countries will need to continue making annual submissions to the CITES Secretariat, and Cameroon, CAR and DRC will need to follow suit and demonstrate compliance as well.

Table 42 combines the national ivory stockpile data reported during the TRAFFIC surveys with other estimates of the status of ivory stockpiles in Central Africa that has come forward over the years since 1990 (Caldwell & Luxmoore, 1990; Milliken, 1995; 1997; 2010; Dublin et al., 1995). These estimates are contrasted against the quantity of ivory that has been seized and reported to ETIS by each of these countries over the period 1989 through 2015. Ivory which has been seized through law enforcement actions should ultimately end up being managed as a component within a country's national ivory stockpiles. As there has been no commercial legal international trade in ivory under CITES since 1989 for any country in Central Africa, it is assumed that ivory from these seizures would be additive to any national stockpile.

Table 43 shows the cumulative weight of ivory seizures made and reported by each of these countries moving through time from 1990 to 2015. In this regard, each additional year of data is additive and the total amount seized over the entire period is given in the last year, 2015.

If such ivory were steadily accumulated in the national ivory stockpile, one would expect that the stockpile would always be a greater figure than the cumulative total of reported ivory seizures at any point in time. In Table 90, that is not always the case, as can be seen for the quantity of ivory reported by CAR in most years. In addition, year-to-year comparisons of ivory stocks also reveal numerous instances where stocks become diminished over earlier estimates of the quantity of ivory held in government custody. Such cases are indicative of ivory stock leakage, thefts, sales or destruction. Ivory stock destruction is certainly a legitimate reason for the quantity of ivory stocks to diminish at particular points in time, and Table 46 notes the quantity and years where such events have taken place in three countries.

Year	Cameroon	CAR	Congo	DRC	Gabon	Total Estimate
1990	-	3,800	-	9,600	1.300	14,700
1994	511	-	40,000	-	610	41,121
1996	511	504	1,000	1,914	1,012	4,941
1998	-	122	-	-	-	122
2006	-	200	996	10,015	-	11,211
2007	-	200	2,075	10,565	2,052	14,892
2009	-	500	3,000	14,800	2,739	21,039
2012	-	-	5,000	-	5,000	10,000
2014	-	-	4,326	-	1,505	5,831
2015	5,000	22	5,000	20,000	1,030	26,720
Ivory seized (ETIS data)	7,686	792	1,333	7,256	3,665	20,732
Ivory destroyed	2,268 (2016)	-	4,700 (2015)	-	4,800 (2012)	11,768
Minimum estimate of stockpile leakage	~2,837	~4,302	~40,507	~7,686	~1,165	-56,497

Table 42: Estimated quantity (kg) of ivory held in national stockpiles in TRAFFIC Ivory Stockpile Database by year, total quantity (kg) of ivory seized 1990–2016 (ETIS data), ivory reportedly destroyed and minimum estimates of stockpile leakage from 1990-2015

Country	1990	1994	1996	1998	2006	2007	2009	2012	2014	2015
CM – ETIS	0	400	400	400	2,491	2,873	4,636	5,286	6,995	7,686
CM - GS	-	511	511	-	-	-	-	-	-	5,000
CF – ETIS	0	0	0	136	768	768	782	792	792	792
CF – GS	3,800	-	504	122	200	200	500	-	-	22
CG – ETIS	0	0	0	0	829	829	841	968	1,168	1,333
CG – GS	-	40,000	1,000	-	996	2,075	3,000	5,000	4,326	668
CD – ETIS	0	0	0	0	5,820	5,820	5,820	6,457	6,507	7,256
CD – GS	9,600	-	1,914	-	10,015	10,565	14,800	20,000	-	-
GA – ETIS	0	500	629	644	1,025	1,025	1,380	2,223	3,054	3,665
GA - GS	1,300	610	1,012	-	-	2,052	2,739	5,000	1,505	1,030

Table 43: Cumulative weight of ETIS-reported ivory seizures over time against ivory stockpile estimates by country, 1990–2015

On the other hand, ivory sales as a reason for a reduction in the quantity of government-held ivory stock is questionable given that all elephant populations in Central Africa remain in Appendix I of CITES and commercial international trade is prohibited. Domestic sales would only be legal in cases where governments are in full compliance with the provisions for internal trade in ivory as articulated in Resolution Conf. 10.10 which, for most of this period, stated:

"RECOMMENDS to those Parties in whose jurisdiction there is an ivory carving industry that is not yet structured, organized or controlled and to those Parties designated as ivory importing countries, that comprehensive internal legislative, regulatory and enforcement measures be adopted to:

- a. register or license all importers, manufacturers, wholesalers and retailers dealing in raw, semi-worked or worked ivory products;
- b. establish a nationwide procedure, particularly in retail outlets, informing tourists and other non-nationals that they should not purchase ivory in cases where it is illegal for them to import it into their own home countries; and
- c. introduce recording and inspection procedures to enable the Management Authority and other appropriate government agencies to monitor the flow of ivory within the State, particularly by means of:
 - i. compulsory trade controls over raw ivory; and
 - ii. a comprehensive and demonstrably effective reporting and enforcement system for worked ivory"

In fact, none of these Central African countries are in compliance with these requirements and, therefore, if sales of ivory for national trade in ivory were occurring, it would be in violation of this CITES resolution.

Unfortunately, most reductions in ivory stockpiles during this period are believed to have involved either leakage, thefts or illegal sales. Calculations based on year-to-year comparisons of estimated stocks and assessment of ivory stock accumulation from law enforcement actions as reported to ETIS indicate that, over the 26-year period from 1990 through 2015, a minimum of some 56,497 kg of ivory went missing from government custody in these five nations and presumably went into illegal ivory trade. In descending order, Congo (40,507 kg) accounts for 72% of this figure and the DRC (7,686 kg) for another 14%, owing mostly to the status of their ivory stockpiles in the early 1990s which were reportedly large, but subsequently disappeared. CAR (4301 kg), Cameroon (2,837 kg) and Gabon (1,165 kg) accounted for significantly lesser quantities of "lost" ivory during this period. However, all of these figures are a bare minimum as there are serious gaps in our knowledge of the status of ivory stockpile in all of these countries throughout this period, as well as the fact that many (perhaps even most) ivory seizure cases have gone unreported to ETIS data. If anything, the minimum estimates of stockpile leakage are simply indicative of the fact that robust ivory stock management systems have been lacking in all of these countries for decades. Corrective measures under the NIAP process desperately need to be supported and carefully monitored to ensure better performance and accountability moving forward.





5. CONCLUSION

There are three principle reasons for the documented decline in the quantity of ivory on open display in most Central African markets: increased law enforcement pressure, an increase in raw ivory prices, and a decline in elephant numbers. Each of these reasons needs to be examined in detail.

Improved Law Enforcement

It was frequently cited by a number of market vendors that they were increasingly experiencing enhanced regulation and law enforcement action by wildlife officials and other agencies over this period. It is known that in a number of countries, development partner organizations and the NGO community have supported efforts to enhance national law enforcement against wildlife crime. In particular, NGOs in Cameroon (LAGA and then, in more recent years, TRAFFIC and WWF), Congo (PALF) and Gabon (Conservation Justice) have all played significant roles in the promotion of enforcement action targeting ivory trafficking. These long standing partnerships have not only made additional financial and human resources available for longer term, dedicated monitoring and investigations, but have also included capacity building and training events for government actors to scale-up law enforcement performance against illegal wildlife trade.

In the DRC, however, there has not been a long enough, focused initiative or a strong enough nongovernmental organizational presence focused on the subject to support ongoing law enforcement action against wildlife crime. Any governmental actions that have occurred in DRC have been sporadic and half-hearted, rather than strategic and sustained, even though the Kinshasa ivory market had long been recognized as a major problem. Indeed, as far back as CITES CoP12, in 2002, decisions were taken to address the "control of internal ivory trade" and DRC was specifically named (along with nine other countries) for follow-up assessments of control measures by the CITES Secretariat. In fulfilling this task, the Secretariat advised the DRC that it would support sanctions against the country if concrete actions were not taken to curb ivory sales. In September 2005, the Secretariat, assisted by an officer of the Lusaka Agreement Task Force, conducted a

one-day seminar in Kinshasa with representatives of various law enforcement agencies on the CITES Convention, wildlife law enforcement and, in particular, illegal trade in ivory. The Secretariat's report expressed "hopes that this was of assistance to the CITES authorities in their subsequent action against illegal sales in the capital city," and then concluded that DRC did not warrant the imposition of sanctions (CITES, 2005). With that, the DRC gained a reprieve and, a decade later, the open and unregulated ivory market in Kinshasa continued unabated with virtually no evidence of increased law enforcement action as of 2015.

"There are three principle reasons for the documented decline in the quantity of ivory on open display in most Central African markets: increased law enforcement pressure, an increase in raw ivory prices, and a decline in elephant numbers."

There is hope, however, that the situation is changing. In 2009, training in the usage of ETIS took place in the eastern part of DRC, and several conservation NGOs have worked to raise awareness and increase enforcement action since 2013. DRC has committed in its NIAP, which was submitted to the CITES Secretariat in March 2015, that it will "establish a specialized multidisciplinary unit for destruction of the ivory trafficking networks (identification and elimination of the poachers and the ivory markets, as well as the sources of supply of arms and munitions throughout the territory)" and that it will "dismantle the networks and markets for ivory (ivory workers' workshops) and dissolve the association of ivory workers' unions in the DRC (AUAIC)". In support of NIAP objectives, WWF, TRAFFIC and Juristrale began implementation of Application de la loi et lutte contre la criminalité faunique en République Démocratique du Congo (ALCRIF) in

collaboration with ICCN and the DRC police and the judiciary, which raised awareness about elephant and ivory laws and facilitated three law enforcement operations in Bikeko market between March and May 2017. According to market monitors, no ivory items have been openly displayed since 22 May 2017, confirmed by a TRAFFIC investigator in 24-26 June 2017 after a visit to the market. However, discussions with vendors showed that ivory items were merely hidden under the stalls and not kept totally out of the market.

There is every expectation that DRC will, this time, be held accountable for any continuation of its domestic ivory market knowing that the NIAP process specifically allows for sanctions to be imposed, which could include a suspension of all trade in CITES-listed species. In this regard, decisive action on the part of the CITES Parties is likely to become manifest at the 69th meeting of the CITES Standing Committee, to be held in Geneva, Switzerland in late November 2017, when the NIAP process is next under review.

Increasing Ivory Prices

The second major reason given by both ivory carvers and retailers for the decline in local domestic ivory markets has been the escalation in the local price of raw ivory due to increasing demand for ivory in Asia, especially China. This argument basically holds that the export trade for raw ivory progressively outcompeted domestic consumption of elephant tusks for local carving by offering ever increasing sums of money for ivory. In fact, the major increase in ivory prices in Central Africa from 2007 onwards directly coincides with the rapid expansion of ivory trade between Africa and Asia. During this period, the number of large-scale ivory seizures of individual consignments weighing over 500 kg greatly escalated, increasing from one in 2008 to 21 in 2011, according to ETIS data. These large shipments are indicative of the presence of organized transnational criminal syndicates in the trade, most of which were Africa-based but Asian-run operations (Milliken et al., 2012). The ETIS analysis to CITES CoP16 in 2013 concluded that "a pronounced upward trend in illicit trade is particularly evident from 2007 onwards" and "this result strongly indicates that, globally, illicit trade in ivory is at its highest level over the 16-year period [i.e. 1996 through 2011] under examination" Milliken et al., 2012). The ETIS analysis to CITES

"Generally speaking, a surging export trade to Asia became far more profitable than the local production of ivory artifacts by African carvers."

CoP17 in 2016, which included data from 2012 through 2015, further expanded on these important results:

"As previously reported, the illegal trade in ivory has progressively escalated since CoP14 in 2007 and the trend through 2015 further confirms this finding. Since 2010, illicit trade in ivory has been at record high levels. Extending the trend through 2015 allows assessment of a 36-month period of time following the conclusion of CITES CoP16 where the Parties set in motion a far reaching National Ivory Action Plans (NIAP) process to address a range of issues that potentially facilitate illicit trade in ivory. This analysis now provides insights into the first two full years of NIAP implementation and the results as yet show no evidence of a positive impact on overall trade pattern" (Milliken et al., 2016)."

The history of the ivory trade in Africa has been that it always follows the most lucrative pathway, and the recent history of Central Africa's trade is no exception. Generally speaking, a surging export trade to Asia became far more profitable than the local production of ivory artifacts by African carvers. The efficiency of expatriate operators in consolidating vertical integration of the ivory trade, from acquisition of tusks directly from source areas through to export out of Africa, came to dominate the ivory trade throughout most of the sub-region during this period, with the effect of disrupting local markets and displacing African ivory carving operations. Only the Kinshasa market was able to defy the general trend throughout Central Africa.

Declining elephant populations

Another reason given for the decline in local ivory markets by ivory trade industry insiders during the surveys was a shortage in the supply of raw elephant tusks because elephant populations were in decline. If so, in addition to the competition emanating from a revved-up export trade to Asia, over time fewer ivory tusks would be harvested in the face of diminishing elephant populations. With a reduced supply, this state of affairs would have been another factor behind increasing ivory prices and declining local carvings industries in the sub-region.

In fact, elephant population studies conducted in Central Africa confirm that elephant populations were experiencing serious decline throughout this time period. One comprehensive study, which was based on analysis of the largest survey dataset ever assembled for Central Africa's tropical forests, estimated that elephant numbers had declined by some 62% between 2002 and 2011 (Maisels et al., 2013). This study cited "high human population density, hunting intensity, absence of law enforcement, poor governance, and proximity to expanding infrastructure" as the causes behind such rampant decline. Likewise, the IUCN's African Elephant Status Report for 2016 states:

"A number of Central African countries have experienced dramatic losses of some of their elephant populations in the last ten years. These include the loss of between 16,000 and 20,000 forest elephants, representing 60–80% of the population, in Minkebe National Park in Gabon, the loss of approximately 3,000 elephants, representing 50% of the population, in the Ndoki landscape in Congo, the loss of several thousand elephants in the Cameroon section of the

TRIDOM and the loss of more than 50% from a number of smaller populations in Cameroon and the DRC (Thouless et al., 2016)."

These catastrophic losses in elephant numbers over a relatively short period of time have certainly slowed the quantity of ivory being taken out of Central African forests each year. Regardless, the increasing value of elephant tusks has no doubt continued to fuel ongoing exploitation into ever more remote areas because the commodity has become so valuable with prices in 2015 at record high levels throughout the sub-region.

The MIKE programme, which tracks elephant poaching for CITES at some 52 sites in Africa, has continually cited Central Africa as the African subregion having the highest levels of illegally killed elephants.

The MIKE findings are based on surveillance of 15 Central African sites (See Appendix II) with significant elephant populations, including Minkebe (Gabon), Nouabale-Ndoki (Congo), Dzanga-Sangha (CAR) and Boumba-Bek (Cameroon), which are all places mentioned in the IUCN statement noted

"Elephant numbers [in Central Africa] had declined by some 62% between 2002–2011."



above. Since 2003, 11 out of the last 13 years of monitoring have demonstrated unsustainable levels of poaching levels in Central Africa (Figure 16). The key metric in the MIKE programme's assessment of elephant poaching is:

"the Proportion of Illegally Killed Elephants (PIKE), which is calculated as the number of illegally killed elephants found divided by the total number of elephant carcasses encountered by patrols or through other means, aggregated by year for each site. As a ratio, PIKE is a dimensionless quantity that can range in value from zero (no illegally killed elephants encountered) to one (all dead elephants encountered were illegally killed)" (CITES, 2013).

Where PIKE values fall above 5%, which is generally taken as an indicative threshold whereby annual rates of mortality outpace annual recruitment, elephant populations are believed to be in decline. Indeed, for Central Africa in most years, PIKE values have been over 7% and in 2011 the upper confidence limit was estimated to nearly reach as high as 10% (Figure 16). The sustained pattern in the MIKE data for illegal killing of elephants in Central Africa over the last decade clearly supports the notion that significant population decline has occurred in recent years, including almost total collapse in some locations. Over a protracted period of time, this state of affairs

would necessarily lead to a decrease in ivory supply, but "boom and bust" cycles would mark the way.

In the final analysis, there is no question that increased law enforcement, especially that which has occurred in Cameroon, Congo and Gabon involving long-term partnerships between government and NGO players, has created an uncertain and adversarial atmosphere around the open display of ivory products in most markets and retail outlets in Central Africa's major cities. Whilst effective law enforcement actions generally come in waves, where the alignment of honest government players, sufficient resources and steadfast political will falls in sync, the risk of unsustained application and compromised commitment remains high in a sub-region where challenges to the rule of law are endemic. Nevertheless, the net effect of such actions has been the steady retreat of local ivory processing and commerce into the recesses of localized black market trade for products that generally require high-profile visibility and a steady consumer base for robust sales and steady profitability to be realized.

It has been the economics of the trade, however, especially the rapid and persistent increase in raw ivory prices since 2007, which has dealt the most crippling blow to local ivory carving industries in Central Africa in the short term. In the face of an

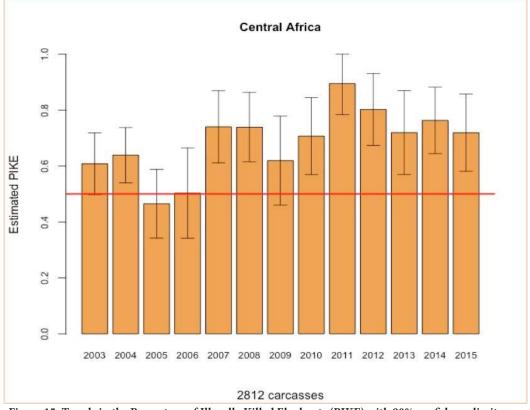


Figure 15: Trends in the Percentage of Illegally Killed Elephants (PIKE) with 90% confidence limits for Central Africa from the MIKE programme, 2003-2015

exploding export trade in elephant tusks to Asia (mostly China), which was primarily orchestrated by well-financed, Asian-run criminal syndicates operating from strategic bases throughout Africa, local ivory industries mostly withered under the pressure of fierce competition.

In the short span of just eight years, raw ivory prices became nearly four times higher in 2015 over 2007 prices. In the process, ivory as a commodity simply became too costly to sustain most carvers, who were also contending with a diminishing consumer base as well. Indeed, indigenous buyers of ivory products have always been few and far between, and African commerce in ivory products generally rises and falls on the appetites of expatriate buyers in local curio markets. With growing awareness for elephant conservation and CITES effectively eliminating increasing numbers of potential expatriate buyers, especially those from North America and Europe, this vacuum was initially mitigated by an escalating numbers of locally-based Asian buyers, who came to dominate many Central African ivory markets since the mid-2000s. But over time, in the face of major prices increases, this important consumer group has also demonstrated a shifting preference for Asian ivory carving motifs, leading to a focus on raw ivory to be carved back home over the purchase of Africa-made products. The combination of an overheated raw ivory export trade that falls mostly in the hands of expatriate traffickers, and a steady reduction in consumer demand at a local scale, has severely impacted the profitability of local ivory carvers, driving many away from any reliance on the commodity for their livelihoods.

"In the short span of just eight years, raw ivory prices became nearly four times higher in 2015 over 2007 prices."

The impact of a diminishing ivory supply in the face of localized elephant population extirpation or decline throughout the region is more difficult to gauge. There is no question that elephant numbers have crashed to catastrophic historical lows throughout the sub-region given the extensive habitat that is still available but basically devoid of the species. The reduction in supply has no doubt

adversely affected the ivory markets of Central Africa, but if finance were available and ivory prices perceived as affordable, there is little reason to believe that local carving operations would not have continued with tusks from outside of the immediate region, say, East or Southern Africa contributing to fill any shortfall in local ivory supply. For example, West Africa, which lost most of its elephant population by the 1900s, was able to sustain local ivory carving industries in Senegal, Côte d'Ivoire and Nigeria for decades on elephant tusks obtained from Central Africa (Courouble et al., 2013). Thus, a reduced supply of ivory in the sub-region is seen as far lesser of a factor in the decline of Central Africa's ivory markets than the increase in price as a result of competition with the raw ivory export trade, or growing investment in law enforcement to curb illegal wildlife trade in specific locations.

It is worth noting that, in the past, Africa's ivory markets have exhibited strong resilience through the decades, just like the people themselves. Martin and Stiles (2000) found resuscitated ivory trades and vibrant carving industries in many parts the African continent, including Central Africa, a decade after the CITES ivory trade ban halted commercial exports of ivory abroad. Without competition from large export trade to Asia—the driving force that so dramatically characterized the 1970s and 1980s and led to a halving of Africa's elephant population at the time of the CITES trade ban—the fortunes of some local ivory carving industries began to creep back. Now, a decade and half later, most markets in Central Africa have again retreated appreciably and the livelihoods of most ivory carvers and sellers are presently focused beyond ivory for good reason: survival. But this characteristic ebb and flow in terms of the status of Africa's ivory markets is fluid over time and low points can usually be explained in terms of major external shocks, such as major political instability or war, particular law enforcement campaigns, or the disruption of supply engendered by market forces that govern supply and demand. Given the right conditions, the pendulum could again swing in the other direction. Thus, whilst this report offers encouraging results of ivory trade demonstrably declining in most parts of Central Africa over the period examined, if government commitment towards reducing illegal trade in ivory wanes, there is every reason to believe that ivory trade will once again expand and find a footing for continued localized trade.



Recommendations

I. Scale-up law enforcement performance against illegal wildlife trade by national and regional law enforcement agencies



VI. Effective stockpile management through the use of minimum standards by the national governments

VII. Paradigm shift by international bodies, national governments, development partners and other wildlife conservation stakeholders

VIII. Permanently close down the Kinshasa ivory market by the government of DRC

IX. Regular Surveys by TRAFFIC and other stakeholders

X.Monitoring of action towards commitments by TRAFFIC and other partners

II. Harmonization of wildlife legislation nationally and regionally by national governments and regional entities such as COMIFAC and ECCAS

III. Inter-agency and regional collaboration between national and regional law enforcement entities / agencies

IV. Effective reporting and use of ETIS by the CITES MAs and other law enforcement authorities of the different countries

V. Commitment to and effective implementation of NIAPs by the CITES parties requested to develop NIAPs, and CAR and Chad



6. RECOMMENDATIONS

The generally positive news contained in this report about the decline of Central African ivory markets needs to be weighed against the fact that, throughout this sub-region, there are still many issues to be addressed before even the fundamentals for sound elephant conservation can be achieved and sustained. The following recommendations are therefore proposed to try to address the issues raised.

I. Scale-up law enforcement performance against illegal wildlife trade by national and regional law enforcement agencies

One of the main reasons mentioned by ivory vendors behind the decline of most ivory markets was increasing and ongoing wildlife law enforcement interventions from law enforcement authorities. This state of affairs is effectively seen in Cameroon, CAR, Congo and Gabon even though more still needs to be done in these countries, especially the fight against corruption and levels of collaboration between the various law enforcement agencies. In DRC, reported law enforcement efforts in March and April 2017 must be sustained and scaled up by the government and law enforcement agencies within the national territory and at exit points which link with other countries in Central, Southern and East Africa. Enhanced enforcement at checkpoints along the identified trafficking routes such as the Souanke-Congo and the Douala/Yaoundé route; the CAR-Cameroon and Gabon-Cameroon routes, the Congo-Gabon and DRC-Congo routes, the DRC-CAR routes all come to mind for attention.

"One of the main reasons mentioned by ivory vendors behind the decline of most ivory markets was increasing and ongoing wildlife law enforcement."

Effective enforcement also goes hand-in-glove with other factors such as the ongoing fight against corruption, investment in capacity building, and

enhanced collaboration at national and regional levels by governments' law enforcement entities. Partner organizations such as TRAFFIC and WWF should therefore continue to include these factors in their strategic programs to support government efforts to ensure effective enforcement of wildlife and related legislation.

II. Harmonization of wildlife legislation nationally and regionally by national governments and regional entities such as COMIFAC and ECCAS

In the five countries surveyed and in Central African countries as a whole, different national legislation confers a range of different protective status to wildlife, including elephants. In some countries, such as Cameroon, ivory trade is still allowed, albeit following various regulatory guidelines. It is evident that different penalties for wildlife crime infractions are meted out by the different countries, and legislative loopholes are exploited by illegal wildlife traffickers to continue with their trades. Some laws consider wildlife offences as crimes, like in DRC, while others treat them like in Cameroon. In some cases, wildlife trade legislation remains ambiguous as is the case in CAR. It is therefore imperative that Cameroon, CAR and Gabon review their wildlife legislation and define wildlife trade offences as real crimes, not just simple misdemeanours. At the regional level, these countries should seek to harmonize their respective national legislations that could be anchored to COMIFAC or ECCAS strategies for the environment and wildlife conservation and effective implementation should be supported NGOs and inter-governmental organizations (IGOs).

The Convergence Plan of COMIFAC already promotes the harmonization of forestry and fiscal policies, and this needs to be implemented accordingly by the respective countries. Expanding such harmonization to wildlife trade law and the conservation of species should now follow. For example, Decision 15/2 of the African Union (AU)-led "African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa" urges countries to strengthen national legislation on illegal trade in wildlife, to recognize wildlife crime as a serious crime and to ensure that those involved

in aiding the criminal acts are held accountable and do not benefit from their crimes. This all needs to be effectively implemented.

III. Inter-agency and regional collaboration between national and regional law enforcement entities / agencies

While wildlife law enforcement is ongoing within the frameworks of existing legislation, not all law enforcement agencies are fully participating in the fight against illegal trade of wildlife products, including ivory. Wildlife issues should not be regarded as the prerogative of the wildlife agencies solely, but should be fully taken as an integral part of their responsibilities and attributions by other agencies such as the police, Customs, gendarmes, the judiciary and others as appropriate. This is already an objective in PAPECALF of COMIFAC that talks of the creation of National Coordination Units (NCUs) by the Wildlife Ministries in collaboration with the Executive Secretariat of COMIFAC.

Collaboration and clear lines of responsibility and interventions should be established and defined accordingly, especially at the national levels. In some instances, there should be a clear interpretation and understanding of the national texts addressing the different mission, attributions, responsibilities and competences of the different law enforcement agencies. This, too, is already addressed in PAPECALF where reinforcement of collaboration within and between countries is an expressed goal. The Urgent Anti-Poaching Action Plan of ECCAS, commonly called PAULAB (Plan d'Action d'Urgence de Lutte Anti-Braconnage), which covers the savannah zones of northern Cameroon, southern Chad and northern CAR also has as one of its objectives the signing of accords of collaboration. At a much higher level, the African Union (AU), under Decision 15/2 of the AU-led African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa, proposes the establishment of an inter-regional co-operation mechanism and partnerships to fight illegal trade in wildlife and share expertise and knowledge to further reduce demand for illegal trade in wildlife; the establishment of national, regional and subregional networks of regional wildlife enforcement to promote increased sharing of best practices and experiences, communication and co-operation links. All these

actions need to be effectively implemented by the respective governments.

At the regional level, collaboration should also be established on information sharing and, where possible, joint field actions such as patrols in cross border protected areas should be undertaken to curb the movement of raw ivory tusks. Further, controls and crack-down operations along cross border trade routes should also be encouraged. Governments of these countries should take full advantage of programs such as AFRICA Trade in Wildlife Information exchange (AFRICA-TWIX), an information exchange platform under COMIFAC managed by TRAFFIC to better enhance information exchange and collaboration on wildlife trade issues.

IV. Effective reporting and use of ETIS by the CITES MAs and other law enforcement authorities of the different countries

With ETIS designed to assess current levels and trends of illegal trade in ivory based on elephant product seizure information, it is necessary for all countries to capture these trade data in their respective countries and provide it to ETIS through the appropriate channels. This will give a better picture of trade in elephant products and consequently help to put in place strategies to combat illegal trade. Proper reporting and information management should yield clear trends over time to enable the different governments to not only measure their enforcement efforts, but also to understand the evolution of illicit trade itself. More trainings need to be done in all countries to fully implement ETIS. In this regard, data collection forms have been distributed to the Wildlife Ministries by TRAFFIC. The CITES Management Authorities (CITES MAs) need to be more involved in the capture of seizure information and the filling of ETIS forms as per CITES specifications, whilst ETIS focal points in all countries need to be established and network with field offices and the NGO community to capture seizure information as appropriate. In general, a clear mechanism needs to be put in place by the different governments so that seizure information reaches either the CITES MA or TRAFFIC as soon as seizures occur with the information relayed according to CITES specifications on reporting and timelines.

V. Commitment to and effective implementation of NIAPs by the CITES parties requested to develop NIAPs, and CAR and Chad

The CITES instituted process to implement National Ivory Action Plans (NIAP) aims at strengthening controls on the trade in ivory and ivory markets, and helping to combat illegal trade. Of the five countries surveyed, only CAR has not been requested by the CITES Parties to develop and implement a NIAP, but all other countries are part of the process. are implemented nationally, Although NIAPs there are national, regional and international connotations under the different NIAP pillars addressing legislation, prosecution, intelligence and investigative actions; national and international wildlife crime co-operation; law enforcement and operational actions; communications and sensitization. Commitment and implementation of these action plans focusing on ivory is therefore imperative to address the illegal ivory trade. NIAP Committees in Cameroon and DRC need to be more effective and hold annual meetings to evaluate actions and reporting. Further, committees need to be created in Congo and Gabon and CAR and Chad should consider creating their own action plans irrespective if they are invited by the CITES Parties to be a formal part of the NIAP process or not. Both countries participated in the TRAFFIC organized CAP workshop in Kinshasa, DRC in November 2015 and expressed interest in the NIAP process. Thus, NIAPs should be seen as an integral part of the conservation strategies of the different countries to enable proper functioning through finance from the national budgets and the implication of State agencies.

VI. Effective stockpile management through the use of minimum standards by the national governments

While Gabon to some extent is using the minimum standards developed by TRAFFIC to help guide ivory stockpile management, its effectiveness still needs to be evaluated and these minimum standards also need to be used in the other countries. The minimum standards include information on the source of ivory, how to measure and mark each piece of ivory in the stockpile, registration of the information, centralization of the ivory in a national

government stockpile, a range of security issues to consider, procedures for audits and periodic verification exercises, and legal provisions among other issues (Ringuet & Lagrot, 2013). Regular inventories (if possible quarterly) and independent audits (if possible yearly) need to be done to safeguard ivory stockpiles over time. A clear transportation mechanism and procedure also needs to be put in place to enable the timely transport of ivory after collection or seizure in the field. In addition to this, the system of marking seized ivory under CITES specifications and national procedures needs to be adhered to and disseminated to field staff in order to stop ivory leakage that continues to fuel ivory trade in the countries surveyed and in other countries of the sub-region.

"It is no longer just a wildlife issue, but also a security issue given the number of rebel groups involved in international ivory trade."

VII. Paradigm shift by international bodies, national governments, development partners and other wildlife conservation stakeholders

Starting with the national governments, there is a dire need for more political will to ensure the development and implementation of good wildlife policies. For State agencies, NGOs and IGOs, there is also a need for new thinking to consider illegal wildlife trade as not only a local poaching and trade issue, but also part of organized transnational crime involving syndicates with wealth and reach that also needs to be tackled accordingly. Real concerted efforts are needed to address the problem of the serious decline in elephant populations throughout Central Africa. It is no longer just a wildlife issue, but also a security issue given the number of rebel groups involved in international ivory trade. Chinese nationals, especially those living long-term in Africa, need to be sensitized about the illegality of ivory trade and other wildlife species. In this regard, the actions for combating illegal wildlife trade in the Forum on China-Africa Cooperation (FOCAC) action

plan needs to be properly implemented. Section 4.6.4 of the action plan states that the African side appreciates that the Chinese government supports Africa in its efforts to protect wildlife resources. The two sides aim to strengthen co-operation in the area of wildlife protection, with China helping African countries to improve protection capabilities, build capacity of environmental rangers, provide African countries with training opportunities on environmental and ecological conservation, explore the possibility of co-operating on wildlife protection demonstration projects, and jointly fight against the illegal trade of fauna and flora products, especially addressing endangered species poaching on the African continent with an emphasis on elephants and rhinos (FOCAC, Johannesburg Action Plan 2016-2018).

VIII. Permanently close down the Kinshasa ivory market by the government of DRC

The Kinshasa ivory market, needs to be totally closed down by the government of DRC. Recent progress under ALCRIF, especially in the Bikeko market where ivory was sold openly until May 2017, should be sustained. Law enforcement strategies need to be refined to support implementation without NGO assistance¹. Another TRAFFIC investigation carried out from 24 to 26 June 2017 showed that though not openly displayed, vendors in 6 stalls visited had ivory under their tables in the market and ready to sell at any moment.

IX. Regular Surveys by TRAFFIC and other stakeholders

TRAFFIC and other partners need to develop monitoring programs to ensure regular surveys with clear timelines, possibly every two years to check trends and changes over time. The survey methods may also need to be changed given that the ivory trade has mostly been driven underground. In this regard, more covert methods may need to be used

1. Closure of the Kinshasa's Ivory market - The strategy implemented by TRAFFIC has borne fruit. After the study on the Ivory market and the support to some seizures operations, since May 18, 2017 the city of Kinshasa is under a great campaign of fight against illegal trafficking of ivory. Large panels are erected at strategic locations of the city such as: The Royal Square, the Central Railway Station and the N'djili International Airport. In addition, a commercial break is broadcast on the national radio and television. It is thanks to the funds from the German Government through BMZ Bengo facility (mainly) with financial support from USAID, the EU, WWF RoA and the collaboration of WWF DRC and the local NGO JURISTRALE.

so that a true picture of the ivory trade in these countries is forthcoming. It is worth reiterating that lack of open display of ivory items does not necessarily imply that the ivory trade has been totally eradicated as witnessed by the continued seizure of ivory and the arrest of traffickers in these countries. All the markets visited during the present survey will need to be surveyed again, including Douala and Yaoundé (Cameroon), Bangui (CAR), Brazzaville and Pointe Noire (Congo), Libreville (Gabon), Kinshasa, Kisangani, Goma, Bukavu and Lubumbashi (DRC). Given that ivory trade is not limited to the cities surveyed and, taking into consideration trans-border trade, it is pertinent for other cities to be surveyed, including Malabo (Equatorial Guinea), Bujumbura (Burundi) and Kigali (Rwanda), as well as N'djamena (Chad) and Lagos (Nigeria). Increased effort to find workshops engaged in ivory processing also needs to occur in order to track the advent of Asian-run ivory carving operations throughout the sub-region.

X. Monitoring of action towards commitments by TRAFFIC and other partners

In fact, none of the above recommendations are new and additional—all are according to what the countries have committed to doing at national, subregional, African-wide or global levels through their participation in various fora and conventions (such as CITES). Indeed, in most cases what is proposed here is already in accordance with what the national laws and regulations of the target countries already stipulate. Hence, the monitoring of action towards commitments becomes essential. In TRAFFIC's view, and as an independent monitoring body mandated to do so by COMIFAC, the best way forward is to monitor actions taken to implement these commitments and to provide feedback to decision-makers in the form of easy-to-digest periodical scorecards. This could be done in the form of a regular document provided to a regional meeting, such as the annual Experts' Meeting ahead of the periodic Ministerial Councils of COMIFAC. This monitoring should also strive to look at the monitoring of internationally agreed priority actions, e.g. CITES, the African Union-led African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa, and the subregional action plans such as PAPECALF and PAULAB.





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Mai Ndombe region of the Democratic Republic of Congo © WWF-US / Julie Pudlowski	iv-v
Forest elephant <i>Loxodonta africana cyclotis</i> lone male in early morning mist. Dzanga Bai. Dzanga-Ndoki National Park, Central African Republic (CAR) © Martin Harvey / WWF	xii–xiii
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African forest elephant <i>Loxodonta africana cyclotis</i> , Gabon. © Hervé Morand / WWF	xix
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An aerial view of the forest canopy, Gabon © WWF / James Morgan	9

An aerial view of a two African elephants <i>Loxodonta africana</i> , Gabon. © WWF / James Morgan	13
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Elephant herd © Gareth Bentley / WWF-US	82-83
Forest elephant. <i>Loxodonta africana cyclotis</i> , Female and calf digging © Martin Harvey / WWF	89



Appendix 1: Persons Met During the Surveys

Number	Name	Organization / Structure	Position	Year of Meeting
		Gabo	n	
1	Adrien Noungou	Ministry of Waters and Forests	Director of Wildlife and Hunting	2007 and 2009
2	Pauwel De Wachter	WWF	Advisor, Minkebe-Odzala Programme	2007 and 2009
3	Anne-Marie Ndongobiang	WCS		2007 and 2009
4	Mamang Jean B.	ECCAS	Anti-Poaching Expert for ECOFAC V	2015
5	Meye Brice Leandre	Ministry of Forest, Environment and Protection of Natural Resources (MFEPRN).	Director of Wildlife and Protected Areas	2015
6	Luc Mathot	Conservation Justice (CJ)	Coordinator	2015
7	Wilde Rosny	CJ	Deputy Coordinator	2015
8	INV3LG	CJ	Professional Investigator	2015

Number	Name	Organization / Structure	Position	Year of Meeting
		Republic o	f Congo	
9	M. Paco	Ministry of Forestry Economy and Sustainable Development (MEFDD)	Director of Wildlife and Protected Areas	2007
10	Adolphe Ngassembo	MEFDD	General Director for Forestry	2007
11	Luc Mathot	Aspinal Foundation / PALF	Coordinator	2009
12	Donatien N'zala	MEFDD	Director of Wildlife and Protected Areas	2009
13	Dieudonné Moubiala	MEFDD	Chief of Service for National Parcs and Protected Areas	2009
14	Jerôme Mokoko	WCS		2009
15	Brian Curran	WCS		2009
16	Roger A. MBETE	MEFDD	Director of Wildlife and Protected Areas	2014
17	Naftali Honig	PALF	Coordinator	2014
18	Adelphe Makosso	PALF	Head of Investigations Department	2014
19	INV7B	PALF	Investigator	2014
20	INF4PN	Artisanal Market	Informant	2014

Number	Name	Organization / Structure	Position	Year of Meeting
		Central Africa	n Republic	
21	Théophile Momokoama	Ministry of Waters and Forest	General Director for Support Services	2007 and 2009
22	Fred Stévy Oyele	Ministry of Waters and Forest	Director for Wildlife and Protected Areas	2007 and 2009
23	Joseph Mandabingui	Ministry of Waters and Forest	Head of Unit – State Property	2007
24	Jean-Michel Borie,	French Cooperation	Technical Adviser to the Minister of Environment	2009
25	Raymond Mbitikon	ECOFAC	Head of the CAR programme	2007
26	Kango Martin	Ministry of Waters and Forest	Unit Manager of la Poudrière	2007 and 2009
27	César Mazangué	Ministry of Waters and Forest	Director of the Legal Department	2009
28	Albert Matonga	Ministry of Waters and Forest	Head of Sangha Anti-Poaching Unit	2009
29	Florent Zowoya	ECOFAC	Head of programme	2009
30	Ndallot Jérémie	Ministry of Waters and Forest	Director of Wildlife and Protected Areas	2015
31	Emmanuel Melvis Ngoumbango	Ministry of Waters and Forest	Chief of Bureau for National Wildlife Laws and Treaties	2015
32	Alfred Mbat Sepamio	Ministry of Waters and Forest	Head of Unit for National Wildlife Stock Management (la Poudrière)	2015
33	Mbailao Jasmine	Ministry of Waters and Forest	Wildlife Unit, Bangui Airport	2015
34	Olivier Rekian D	Customs	CITES focal point for Customs, CAR	2015
35	Tiburce Conjugo	Customs	Customs Chief of Brigade, Bangui Airport	2015
36	Jean B. Yarissem	WWF	Country Director – CAR	2015
37	Hubert Yamande	WWF / RALF	Wildlife Law Enforcement Coordinator	2015

Number	Name	Organization / Structure	Position	Year of Meeting
		Democratic Re	public of Congo	
38	Jaap Schoorl	GIZ	Adviser and Coordinator of the Biodiversity and Forests Programme	2007
39	Sylvie Ouellet	GIZ	Adviser, Kahuzi Biega National Park	2009
40	Dr Pierre Boyzibu	ICCN	Director of National Parks	2007
41	Cosma Wilungula Balongelwa	ICCN	General Administrator	2007, 2009 and 2015
42	Jean-Pierre Mirindi	TRAFFIC	Consultant in Goma	2009
43	Dr. John Hart	TL2 Project	Manager	2007
44	Dr. Térèse Hart	TL2 Project	Officer	2007 and 2009
45	Constance Mafuta		Journalist – Kinshasa	2007
46	Thierry Katsuva	ICCN	Legal Adviser	2015
47	Joe Kassongo	JURISTRALE	Coordinator	2015
48	Bruno Perodeau	WWF	Director of Conservation, DRC	2015
49	Garry Miller	WWF	Acting Country Director, DRC	2015
50	Alfred Yoko	WWF	Coordinator of Wildlife Program	2015
51	John Kabange Mukubu	Custom	Airport Unit – Kinshasa	2015

Number	Name	Organization / Structure	Position	Year of Meeting
		Came	roon	
52	Ofir Drori	LAGA / EAGLE Network	Director	2007 and 2015
53	Samuel Ebia	MINFOF	Regional Delegate for Littoral, Douala	2007
54	Jean Medjo	MINFOF	Director of Forestry Department	2007
55	Aboubakar Kouotou	MINFOF	Head of Anti-Poaching Unit	2007
56	Lekealem Joseph	MINFOF	Director of Wildlife and Protected Areas	2015
57	Zourmba Juoullier	MINFOF	CITES Management Authority (MA),	2015
58	Zambo Frank T.	MINFOF	Focal Point, NIAP	2015
59	Pandong Eitel	MINFOF	Littoral Regional Delegate, Douala	2015
60	Amende Daniel	MINFOF	Regional Chief of Wildlife – Littoral	2015
61	Eben Ebai Samuel	MINFOF	South West Regional Delegate, Buea	2015
62	Joseph Kpoumie	Customs	Commander - South West Region, Limbe	2015
63	Alain Ononino	WWF	Wildlife Law Enforcement Coordinator	2015
64	Anoah Humphrey	ZSL	Wildlife Law Enforcement Coordinator	2015
65	InvCD7	LAGA	Investigator	2015
66	InvCY8	LAGA	Investigator	2015

Appendix 2: MIKE Sites in Central Africa

Country	Site		
Cameroon	Boumba Bek National Park		
	Waza National Park		
Central African	Bangassou Classified Forest		
Republic	Dzanga-Sangha Protected Area		
	Sangba Pilot Zone		
Chad	Zakouma National Park		
Congo	Nouabalé Ndoki National Park		
	Odzala-Kokoua National Park		
Democratic Republic of	Garamba National Park		
the Congo	Kahuzi Biega National Park		
	Okapi Wildlife Reserve		
	Salonga National Park		
	Virunga National Park		
Gabon	LopéNational Park		
	Minkébé National Park		

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

For further information contact: TRAFFIC Central Africa Regional Office c/o IUCN Regional Office for Central Africa, P.O.Box: 5506 Yaounde, Cameroon. Telephone: +237 22 06 74 09 E-mail: tcaf@traffic.org

TRAFFIC
Headquarters Office
David Attenborough Building, Pembroke Street,
Cambridge CB2 3QZ, UK.
Telephone: +44 (0)1223 277427
E-mail: traffic@traffic.org

UK Registered Charity No. 1076722, Registered Limited Company No. 3785518.

