

The Ivory Trade Review

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The following extract outlines the Ivory Trade Review. ITR is a collaborative study, initiated by AERSG, involving CITES/AEWG, TRAFFIC, WTMU and the funding agencies WCI, WWF, EEC and AWF. The findings and recommendations will be submitted to the African Elephant Working Group's July 1989 meeting in preparation for its recommendations to the CITES full Conference of Parties, to be held in Switzerland later this year.

The study involves a large number of participants working on the ivory trade, elephant population dynamics and public awareness. Directed by a joint committee of the participating agencies, the study is co-ordinated by Stephen Cobb in consultation with the chairman, AERSG.

Introduction

There can no longer be serious doubt about the predicament of the elephant. In May 1987, AERSG concluded on the basis of improved population estimates, computer simulations of elephant demography and a detailed reanalysis of the ivory trade statistics that the demand for ivory is causing a steep population decline. The evidence is compelling.

The continental population is now estimated at around 750,000, down half in a decade. Repeated counts of many populations over much of Africa confirm the overall trend and negate the importance of habitat loss. Poaching is heavy in most elephant populations, even those remote from human settlement. Overall, elephant numbers are declining five times faster than habitat loss and two-and-a-half times faster than human population increase.

Information from the field is corroborated by ivory trade statistics, now greatly improved through the efforts of CITES and TRAFFIC. Constant yields of ivory from the mid-1970s to early 1980s were, it transpires, maintained by an increasing harvest of progressively smaller elephants. The continental population was heavily overexploited by the early 1980s when, according to trade figures, half the animals killed were reproductive females.

Computer simulations of elephant demography have corroborated the field and trade statistics. The models reveal an important and unique characteristic of the ivory trade: natural mortality yields the highest theoretical ivory production. Moreover, annual ivory yields increase progressively with age. Further, because the unit price of ivory increases with tusk weight, the profitability of an elephant's ivory rises steeply with age.

A steep price rise in ivory as elephant numbers have shrunk during the 1980s demonstrates that demand is still high. The continuing uncertainty over what really drives the market, whether it is ivory's scarcity value or the demand for carved products, underscores the urgent need for the present review. Whatever the reason for ivory demand, it continues to halve the population of elephants every 10 years. That rate will, moreover, quicken and reduce the population Africa-wide to around 100,000 in the next 15 to 20 years. And, even though the ivory profits per animal will continue rising, giving additional incentive to poachers, the gross value of ivory to African nations will decline long before then.

The African elephant is vulnerable to extinction for the same reasons as the great whales: it is more profitable to sink the capital value of slow reproducing species into high growth investments. In Africa, where hard currency is sought by governments for development and debt servicing, and by the wealthy or insecure for hard currency, ivory is a highly prized commodity worth \$120 million annually. State ownership, the migratory nature of elephants and the considerable damage they do to farmers' crops make them especially vulnerable to poachers. Most traded ivory originates illegally, showing up the weaknesses in present international trade agreements. Furthermore, the ivory proceeds from many African countries end up in private bank accounts where they do little for development or conservation.

The threats to the elephants and the blatant abuses by importing countries accepting ivory from non-party nations led the African governments to propose the CITES ivory quota system in 1984. Under this system, each ivory producing country sets annual quotas on the basis of sustainable offtakes. Importing nations are required to reject any consignments exceeding the quota for each country. Compliance is monitored by CITES. Though the quota system has reduced illegal imports into consumer nations, it has failed to regulate the ivory trade and slow the rate of elephant loss. Several weaknesses and loopholes are exploited by corrupt officials and international traders. Large consignments of ivory are traded by non-party states, which may explain an increasing discrepancy between ivory offtakes projected from known elephant mortalities in Africa and calculations made from CITES ivory statistics.

The greatest weakness of present legislation is the lack of any mechanism to mandate a globally sustainable offtake of ivory. The large fraction of poached ivory legalized by exporting countries, the mounting volume routed through non-signatory or delinquent signatory nations, the strong incentives to bypass the new international procedures, a rapidly rising human population, increasing poverty and declining economies over much of Africa, combine to form a bleak outlook for the elephant.

Justification

Virtually every African nation has explicit conservation policies for maintaining renewable natural resources and wildlife populations. CITES, of which virtually all African nations with elephants are signatories, expressly aims to regulate trade in threatened species, including the elephant, at sustainable levels. Yet national and international policies notwithstanding, the elephant is becoming ever more threatened by the ivory trade. Strong economic, social and biological arguments for reviewing the ivory trade in relation to conservation policies can therefore be made.

Ivory is traded around the world for pleasure and profit. Yet the way in which the trade works and whether there is any latitude in reducing its impact on elephants is far from clear. For example, we do not know whether ivory prices respond in the same way as say tropical hardwoods to normal international supply and demand. We have little idea of why there is a narrowing price gap between raw and worked ivory, the extent to which traders hoard raw stocks, or the effect that speculators have on future demand. We have little better idea of the role that international currency exchange control and exchange rates play in ivory marketing, or the extent to which governments and private dealers use ivory as secure currency.

That the ivory trade is badly mismanaged from a sustainable resource point of view is indisputable. Computer simulations, for example, have shown that far greater profits could be made from Africa's existing elephant population if it were better managed. Higher ivory yields and unit prices could be obtained by managing populations outside protected areas for the production of larger tusks. Ivory income could be doubled by setting minimum tradeable tusk weights and harvesting only older animals. In other cases the value of elephants is greatly increased by using a wider range of products, such as meat and skin from culled animals, as in Zimbabwe, or through tourism as in Kenya and Tanzania. Ivory profits are not, in other words, the only consideration. National elephant conservation and management plans could ensure a balance between protection and exploitation, between protecting crops on the one hand, and elephants in designated areas on the other. An ivory trade review should help draw attention to the multiple value of elephants.

Strong government controls could complement international measures in stemming the tremendous illegal trade and increasing the value of elephants to African nations. The illegal trade flourishes largely because of private profiteers and corrupt officials. If

undercover trade within sovereign states cannot be solved by international trade agreements, it can and must be addressed continentally, perhaps by the Organization of African Unity, and as a matter of national public interest.

Public sentiment also justifies a review of the trade. Attitudes towards elephants and the ivory trade differ widely: from the hard line of many westerners that no elephants should be killed for ivory or any other reason, to the starving African farmers who would gladly see all elephants eradicated, to the 110,000 members of the Wildlife Clubs of Kenya who actively campaigned for a total hunting ban. The conflict often hinges on who gains and loses from ivory and elephants. It would be meaningless to review ivory trade policies without addressing the broader question of the interest groups and attitudes within the producer and consumer nations.

Finally, an ivory policy review is justified biologically and symbolically. Elephants are conservation flagships which, like the great whales, arouse tremendous public sentiment. They elicit support for wildlife that few other species are able to do and, in a sense, act as a conservation barometer. If elephants can be protected and managed well, the outlook is good for other species. If not, it will be hard to whip up public sympathy and support for Africa's less charismatic endangered species.

The Ivory Trade Review

The review addresses several topics, including ivory markets, the status of elephants, conservation and management policies, and public attitudes that bear directly or indirectly on the ivory trade and the options for its effective regulation. Data will be drawn from existing sources and reports where possible and commissioned studies where necessary.

Ivory as a commodity

Much is already known about the end-uses of traded ivory from surveys commissioned by AERSG, USFAWS and other agencies. Nevertheless, a number of gaps particularly in the internal African carving industry and new international outlets, have yet to be filled. What are the main uses of ivory today? Are there any substitutes and what would be the implications of encouraging these?

Market networks will also be investigated. The data amassed by the Conservation Monitoring Centre and the TRAFFIC network give an important picture of the size and location of markets, and the movement and price of ivory. The review will collate data from additional sources in the course of investigations into African, Asian, European and North American markets. An important area of investigation will be the pricing steps from poacher to carver and finally to consumer. Far more detail is needed on key actors in the ivory market and how supply, demand and price are related. The extent to which speculation drives price and the impact of illegal consignments on the market will be studied. The movement and volumes of ivory moving outside CITES channels will be investigated in detail because of their significance in estimating the numbers of elephants killed for the trade and in improving trade regulations. In order to anticipate future patterns in ivory trade, the contemporary market studies will be complemented by a review of historical trends. This will include an analysis of the effects of CITES as a whole and of the quota system in particular on both the legal and illegal ivory trade.

Finally, models will be developed to study the impact of various market scenarios on ivory production, prices and profits to the participants. Demographic models already developed by Wildlife Conservation International for the purpose of predicting the response of elephant populations to various hunting regimes, will be refined and applied in this study. They will be used to link elephant population models, economic models and international commodity markets to answer questions such as: What is the optimum harvesting strategy to maximize sustainable ivory profits? and, What is the prognosis for the African elephant under conditions ranging from free markets to producer or trader cartels?

Elephant status and population dynamics The future of the ivory trade is bound to the fate of the elephant. Yet the ivory market operates with little reference to the status of elephants or the potentially sustainable supply of ivory, despite the quota system to which all producer nations are legally bound. A mechanism for

projecting sustainable ivory yields from population estimates and demographic models is urgently needed in a form usable by national wildlife authorities. This mechanism will only be useful, however, if backed by strong regulatory controls within producer countries.

This aspect of the investigation will focus on the status of elephants in all producer countries in Africa. The extensive AERSG data base has been collated on UNEP's Global Information System in Nairobi. A recently updated report by Burrill and Douglas-Hamilton on the status of elephants will be used to estimate sustainable ivory yields for each producer country. Several options for improving the scientific basis of ivory quotas will be considered after reviewing other agencies, including IWC, dealing in global wildlife quotas.

National policies and the value of elephants The value of elephants to society, over and above ivory, will also be considered, largely from a rich source of existing data. Elephants should not be viewed simply as an ivory factory; they have great intrinsic and instrumental value, other than ivory, that should be considered.

Though wildlife policies differ widely among African nations, most have explicit policies for preserving species. Over 200,000 elephants are officially protected within 400 parks and reserves throughout Africa, though even here the species is rapidly losing ground. Despite their decline in protected areas, elephants have considerable value through tourism and found ivory. In Kenya alone the tourist revenues attributable to elephants exceed \$ 10 million. Ivory from natural mortality in parks and reserves is potentially worth \$ 8 million, enough to pay the entire continent's conservation budget. In other cases, especially in forests and wooded savannahs, elephants are important agents of ecological diversification, often to the benefit of humans as well as wildlife. Elephants outside, and in some cases inside, parks and reserves, generate revenues through meat, skins and hunting revenues, at both a national and local levels. These benefits often far outweigh ivory revenues. Against these benefits must be weighed the cost of elephants, especially to local communities, in terms of damage to crops, animal stock, installations and human life. These costs have rarely been calculated, and never for the continent as a whole.

Attitudes towards ivory and elephants Attitudes towards ivory products and elephants vary widely both within Africa and in the consumer nations. Legislative action to ban ivory acquired illegally has recently been passed in the US. In Europe the plight of the elephant is causing great concern to conservationists. A number of African governments have officially banned elephant hunting and - ivory trading, though they may still sell accumulated ivory stocks. How important are public attitudes in influencing policy in key trading nations, and how might they change if the plight of the elephant worsens and publicity widens? What would be the effect of ivory trade bans or import restrictions in different trading nations and regions such as the Far East and United States?

The review will look at such attitudes, how they are changing or might change with suitable publicity, and how such attitudes might affect the ivory trade.

Options in ivory trading The review will look at a wide range of options open to the producer and consumer nations to bring ivory quotas in line with sustainable elephant populations. It will look particularly closely at the widening private ivory markets, whether they have been affected one way or another by the quota system, and methods of exerting tighter governmental and international control. Is any trading coalition, whether producer cartel, dealer association or grouping of consumer nations established in the interests of sustainability, either possible or desirable? What are the options for improving or complementing the role of CITES? Could a producer cartel and a centralized auction help conserve elephants by setting continental off-take quotas and increasing the ivory returns to producer governments, rather than free-market traders and corrupt officials? These are some of the options the review will explore.

The review team will also outline its analysis of how the trade responds to global social and economic forces, and thus the extent to which trade is amenable to control within Africa.