Preface

Conserving the African elephant has been one of the top priorities since WWF was formed in 1961.

Like the panda which inspired the WWF logo, the elephant has a special "flagship" status which we use to highlight not only the threats to its own survival but also the plight of the habitats in which it lives.

Elephant conservation issues are complex, as are the human responses to them. It is an animal which can evoke our finest feelings when we see it in its natural state, or our sorrow when we see it slaughtered for a few dollars' worth of ivory. And, those of us in the North should remember, it can also provoke fear and distress when its 300-kilogram daily diet comes from the family food supply and threatens human survival.

Early in 1997, WWF published Conserving Africa's Elephants, a document outlining the difficulties of elephant conservation and summarizing our priorities for action. Since then the issues have only become more urgent and more complex, most notably as a result of the decision in that same year (under CITES, the Convention on International Trade in Endangered Species) to ease the total ban on international trade in ivory.

The purpose of this publication, therefore, is to provide an updated summary of the present elephant conservation situation, while placing the 1997 decision in its proper context.

WWF's continuing intention is to help governments and local communities apply innovative yet pragmatic approaches. We all must seek the path, which may be difficult and slow, between the realities of the present African context and a long-term vision in which the elephant has its rightful place.

In the short term, one goal must be to show that a living elephant is "worth" more than a dead one: an elephant without value in the eyes of those who must live with it - and who must pay for its conservation - faces a highly compromised future.

Improved understanding is yielding promising new conservation measures. But we must accept that long-term survival of the species depends not on science alone but on solutions that honestly embrace the cultural, social, economic, and political dimensions of Africa and its people.

Five priorities have been set for WWF's "elephant in the new millennium" activities.

One, slowing the loss of the elephant's natural habitat - mainly by providing support to protected areas and by helping local communities to develop economic activities which benefit both people and elephants on the land they share.

Two, strengthening activities against ivory poachers and the illegal ivory trade.

Three, reducing conflict between human and elephant populations through sensible and sustainable approaches.

Four, determining the status of elephant populations through more and improved surveys and range assessments.

Five, increasing technical and financial support from the industrialized world to enhance the capacities of local wildlife authorities in all aspects of elephant management and conservation - including the ability to draft enabling legislation and to review, reform, and implement relevant national and international policies.

We should all count the costs of conserving the African elephant. These are not costs to be borne by Africa alone: they truly need global support.

Dr Claude Martin Director General WWF International

Introduction

Few animals have made a greater impact on humankind than the elephant. Cows are more useful. Dogs make more convenient companions. But the elephant is judged by other standards. Wherever it leaves its mark - in our imagination, our culture, or our vegetable plot - the impression goes deep.

An elephant is imposing, awe-inspiring. It is also highly intelligent; and it has other qualities that inspire affection as well as respect. Elephants form close family units; they care for their young; they even (or so it appears) care about their dead. Their peculiar shape can seem in our eyes mysteriously exotic or, alternatively, comically cute. In some eastern cultures, the elephant has become a god, with human limbs; in Western culture, by a similar anthropomorphic assimilation, it is more commonly cherished as a character in a cartoon or a children's book - perhaps wearing a suit and a hat.

Where elephants still live in the wild, they are naturally seen in a different light. Scientists study their physiology, behaviour, and place in the local ecology. Hunters and poachers see them as a source of ivory, meat, and hides. Farmers are more likely to regard them as dangerous pests that destroy crops.

Yet different ways of seeing elephants are not necessarily mutually exclusive; and every individual view is likely to be coloured by some mixture of reverence and familiarity, fantasy and realism. A hunter may admire the animal he kills. An African child might love reading about elephants, yet be scared stiff of meeting one on the way to school. The farmer may well see in the elephant, always part of his ancestors' world and mythology, the emblematic significance which has made it "a major symbol for Africa". So he would like it to be there for his children. But at a distance.

Likewise the European tourist on safari may see the elephant to some extent in terms of myth. His ancestors hunted the woolly mammoth, now extinct; so that the game reserve with its elephants roaming free (to be shot with a camera from the comparative safety of a four-wheel drive) may conjure images of the pristine wilderness, such as Europe might once have been, but is no longer. He may nonetheless be uneasily aware that this idyll is not paradise (which costs more than he has paid), nor can it last for ever: just as his great-grandparents never had

this wonderful opportunity, so, he fears, his greatgrandchildren may not have it either.

Elephants in the Balance is written at a point where the long-term survival of its elephants represents one of the great conservation challenges that Africa faces. In 1997, a decision to ease the total ban on the international ivory trade - a trade that had caused the deaths of hundreds of thousands of elephants - rekindled a debate on elephant conservation that has never seemed more urgent or more complex.

Nobody, least of all in Africa, needs reminding of the impact that humankind has had and is having on elephants. The question is, what should and can be done? The conflicting interests of elephants and people have thrown up a variety of problems. Some of these seem intractable; and many have become caught up in other conflicts - between man and nature, between realism and sentiment, between industrialized and developing nations, between emergent African nationalism and post-colonial anxieties, between Africans and other Africans.

There are no slick, sound-bite solutions. This publication aims simply to give the reader an outline of the issues involved in conserving Africa's elephants, thereby setting the 1997 decision — a decision many people found disturbing — in its proper context. No concerned person should think that he or she has nothing to contribute to the debate. The informed, realistic, and practical support of the public, both in and outside Africa, could mean the difference for the elephant between extinction and survival.

I. The elephant in retreat

In the last quarter of the twentieth century, elephant populations declined drastically across the continent of Africa. Statistics cannot be precise, because in many cases data are unavailable or unreliable (see box page 11); but by extrapolation from the figures that did exist, and from the more telling evidence of the carcasses that littered their range, it was possible to assume very large losses. At the end of the 1980s, some predicted that the species would be extinct within 20 years.

Today, conditions vary from country to country. In some parts of the continent elephant populations are increasing; elsewhere they are still decreasing. Nevertheless, the underlying reality with which we must come to terms is that elephants are not going to return in the numbers that existed in the late 1960s. Where human populations are rising and human development and settlement expanding, there is less space for wild animals. That is a fact, demonstrable by the absence in urbanized Europe of once common wolves and bears, or in North America of vast herds of buffalo, replaced throughout the Great Plains with corn and soy beans. Human population growth in Africa is now about 3 per cent per annum on average. The present population of around 740 million is expected to double by the year 2025.

The extension of small-scale agriculture and changes in patterns of land-use are also important factors here. For example, huge international logging operations are opening up the forest in central Africa, allowing human activities to encroach on elephant habitat. Elsewhere, new crop strains permit the cultivation of areas which were once undisputed elephant territory. For one reason or another, room for people and elephants to share is decreasing, and where they must share it, trouble is inevitable.

Not in my back yard, please

Subsistence farmers constitute about 60 per cent of Africa's population. Their life is not easy. The farmer's plot of land is small; water may be scarce. If getting enough to eat is hard, how is he to afford education and medical care for his children? His fields, on which everything depends, could be devastated in a single night by some freak storm. Or by marauding elephants.

The farmer might wake up one morning to find his maize flattened and eaten, or his granary smashed and empty, his irrigation system destroyed, his harvest and his investment gone. The elephants might be local, or coming in search of food from some distance away. In fact, when there is known to be a risk, the farmer and family are likely to stay up all night on guard. They try to scare the animals off by banging pots and pans, lighting flares, and throwing missiles.

This is not a party. It is a cold, exhausting, demoralizing all-night chore - when it's not frankly terrifying. And it is not even always effective. Elephants quickly become used to noise and lights. And there are "problem" animals - usually bulls - who have acquired the habit of cropraiding, just as some big cats develop a taste for human flesh. Would you care to hurl a rock at a looming bull elephant almost as big as a double-decker bus?

People, including children, do get killed by elephants: in Kenya alone, over a three-year period from 1990 to 1993, over 100 people met their death. It is true that the degree of conflict between people and elephants varies widely, depending on the relative numbers of both, what the land is used for, and other factors. For example, pastoralists like Kenya's Maasai, keepers of cattle, tolerate elephants more easily than do subsistence farmers. But troubles between human beings and elephants are a common topic in the African press. Whether this is due to an actual escalation of incidents, or to the fact that since democracy, voters are more aware of their rights and influence, the result is the same: many rural people perceive elephants as a menace. They want something done. In one survey in Cameroon, 41 per cent of villagers polled wanted elephants moved and fenced in elsewhere. A significant minority wanted them all shot.

Too little space - or too many elephants?

It might seem obvious that the solution to the elephant problem is to keep them in game reserves and national parks. There, they can live at liberty, sharing the land with other wild animals, just as nature intended.

In reality it is not quite like that - which is not to deny the crucial role of protected areas in elephant conservation. Many of Africa's remaining herds of any appreciable size are found in parks and reserves. Parks also provide a focus for tourism, which in its turn raises the profile of elephant conservation worldwide, and brings in revenue for it.

Yet, parks are in no sense a complete solution. First, there are simply not enough of them (reserves of the relevant type comprise only about 5 per cent of sub-Saharan Africa) - not enough of them, that is, to let there be all the elephants anybody might ever want. And for the reasons of space outlined above, there are never going to be.

Second, a contented, protected elephant population can increase by 5 per cent a year (man being their only real enemy) and will soon outgrow any area in which it is confined. In nature, when herds find the food supply inadequate for whatever reason, they move on to greener pastures. If they can't, there's trouble.

In Kenya's Tsavo National Park in the late 1960s the elephant population reached very high densities - there were about 40,000 - and they were doing severe damage to the environment: they destroyed, for instance, great baobab trees that had stood for centuries. Now, the purpose of a wildlife park is to maintain all its plant and animal life in an ecological balance. And so the question arose of culling the Tsavo elephants (i.e. killing a proportion of them). But before anything could be done, a severe drought relieved the situation, although neither mercifully nor economically. At least 9,000 elephants died of thirst and starvation - along with great numbers of rhinos and other creatures whose food supplies the elephants had ravaged. Heavy poaching subsequently reduced numbers even further.

In time the park's vegetation recovered. The fact is that the natural balance of any given place, like a capitalist market economy, has its ups and downs: anywhere on the planet at any time, one species may be thriving at the expense of another. The market analogy also explains a point that puzzles some people: why it is possible for elephants to be considered excessively numerous in some parts of Africa, while recognized in other parts as in need of protection.

In Africa, as elsewhere, the dominant species at present is man; and the elephant, for better or worse, forms part of a human economy based on values and market forces of supply and demand. If the elephant is integrated into the local economy - that is, if it serves a need, is accessible and affordable, then people will want as many as supply that need. If not, then - to put it brutally - an elephant, as easily as a pizza parlour, can go out of business.

This question of economics is central to the elephant problem, and we shall return to it. Meanwhile, the point to remember is that to say elephants are "excessively" numerous or "alarmingly" few is to make a human value-judgement; and when a conservationist makes that judgement,

he or she implicitly accepts the responsibility of doing something about it.

Culling is one course of action. Another is translocation - that is, moving the elephants, either to another park or to a private reserve. This was often the preferred option for dealing with young elephants orphaned by culling operations. But translocation is not self-evidently "kind": there is evidence that elephants can suffer traumatic after-effects, manifested in extreme aggression and fear of humans. Family groups are thought to survive the disruption better - but some family members can get left behind. Then, the capture and transport of such large animals is very expensive, and money for conservation is always in short supply. And there is no guarantee that they will be any safer in their new home.

The main drawback to translocation, however, is that it is a short-term solution to a long-term problem. Truckloads of elephants cannot criss-cross the continent indefinitely between wildlife havens that become increasingly isolated in the midst of human settlement.

Either the elephants will spill out of these reserves in larger numbers than adjacent villages can cope with; or they are fenced in, in which case their traditional dispersal routes - the natural defense against overcrowding and shortages - are cut. Electric fences around huge park perimeters have in any case not so far proved to be the answer: they are too costly to install and maintain, and are not always elephant-proof.

The problem of competition between people and elephants for limited space is not going to go away, and it admits of no single, obvious solution. In Chapter 3 - The way forward - some recent approaches to it are reviewed. But because the problem is long-term, and because any solution can only be piecemeal and pragmatic, it is not the sort of issue that stirs the blood and attracts banner headlines worldwide.

Conversely, the other grave threat to elephants - mankind's demand for their ivory tusks - has been around for a long time, and in recent decades has become the focus of an intense international conservation debate.

Poaching's terrible toll

Since time immemorial, elephants have been killed for their ivory, and trade in this precious commodity - known as "white gold" - has been carried on for centuries. In Africa, herds had been hunted to extinction in the north of the continent hundreds of years before the Europeans arrived with their guns. In Victorian England, every drawing room was filled with ivory knick-knacks, while "the ivories" became a slang term for dice and piano keys; and by the end of the nineteenth century some of Africa's elephant populations were significantly diminished.

A drop in the demand for ivory after the First World War helped some of them to recover. But not for long. From the 1970s, there came a sudden upsurge in the ivory trade. Prices, which had been stable for decades, soared, possibly because of global financial instability. Exports rose from 200 tonnes in the 1950s to nearly 1,000 tonnes in the 1980s. The precipitous decline in most African elephant populations was a direct consequence of illegal killing, fuelled by the ivory trade.

One estimate has it that 70,000 elephants were being killed every year from the mid-1970s through the 1980s. Kenya, Zambia, and Tanzania were particularly badly hit. They lost perhaps 80 per cent of their herds. In Zambia's Luangwa Valley, between 1973 and 1987, an estimated 56,000 elephants were lost to poachers. On just one day in March 1989, poachers shot 17 elephants in Kenya's Tsavo National Park.

The situation was aggravated in more than one country by war and civil unrest - factors still present in many parts of Africa. Where firearms are easily obtainable, soldiers unpaid, refugees unfed, and the forces of law and order preoccupied elsewhere, all forms of wildlife are put acutely at risk. At any rate, the elephant slaughter became big business, ugly and violent, including in its effects on human society. Like drug barons, heavily armed gangs took over entire areas. Not only middlemen, but game wardens and other government officials might expect a pay-off. Kenya and Zimbabwe instigated a shoot-to-kill policy for poachers. Not surprisingly, poachers shot back.

While corrupt government officials may evoke little sympathy, this is not always the case with poachers. Desperately poor rural Africans who turn to poaching are not necessarily evil or unprincipled. In many regions,

poaching may well be the only way to live, apart from subsistence farming. What's one dead elephant, when you have no money and little to eat - and when the elephant, if left alive, might itself eat what little you have? A good pair of tusks might be worth four head of cattle. And meat from the elephant - besides feeding the family - can also be sold.

The more ivory is worth on the black market, the harder the trade is driven, because profits are higher. But the poacher himself, on the lowest rung of the ladder, may see little of these profits, and simply kill any elephant within range, of any size, for what he can get.

Once this illegal hunting has reached a certain critical mass, it becomes very difficult, and expensive, for governments and wildlife authorities to contain it. Constant vigilance is required over huge areas. Anti-poaching patrols need vehicles and air support, guns, ammunition, and fuel. It can also be very hard to distinguish illegal from legal ivory (the latter being government stocks derived from culls, natural deaths, or seizures and confiscations). Many of the countries involved have no efficient system for marking and storing ivory. Which makes it a lot easier to smuggle and "launder" it with impunity.

Efficient controls require funds which in most cases simply are not there. Inflation, devaluation, and other urgent demands on the exchequer mean that relatively few African nations have cash to spare for conservation. Structural adjustment programmes imposed by the International Monetary Fund have meant reductions in government employees, including game scouts and customs officers. In many cases, staff are underpaid, morale is low, corruption sometimes thrives, and cynicism is rife.

Illegal or legal, by the end of the 1980s the "off-take" of ivory was recognized to be "unsustainable"; or, in layman's words, the rate at which they were being killed spelt an end to elephants sooner rather than later. There was a grim logic to this prediction. When hunters are after ivory, they go first for the animal with the biggest tusks. These are the older adults, and males have the biggest.

Preferential killing of males upsets a population's sex ratio. Killing matriarch females on the other hand can leave whole families leaderless and more vulnerable.

Furthermore, killing the animals with the largest tusks may over time alter the gene pool in favour of animals with smaller tusks. Tusks on today's market are on average less than half the size they were a century ago. Smaller tusks means more of them are needed to supply the same demand. So more animals will be killed, many of whom will not have reached reproductive age. It is a relentless downward spiral which, if carried to its conclusion, will finish both the elephants and the ivory trade.

II. The ivory trade: to ban or not to ban?

It was in response to this critical situation that, late in 1989, the international trade in ivory was banned. This was achieved under CITES - the convention responsible for regulating international trade in endangered species (see box page 19) - and the African elephant was moved to Appendix I, the category afforded highest protection. All cross-border trade in ivory and other elephant products between Parties to the Convention became illegal. The ban came as a severe blow to ivory markets around the world, and to those countries in Africa, like Zimbabwe and South Africa, that were producing ivory as well as other elephant products, such as leather, for export.

The 1989 decision did not come out of the blue. CITES had put the severely endangered Asian elephant on AppendixI in 1976 and in 1977 the African elephant was added to AppendixII. A close eye was being kept on elephants and in 1985 quotas for ivory exports had been introduced for African range states.

But by the late 1980s, and in spite of a decrease in ivory trade volumes to below 1950 levels, CITES was widely perceived as having failed the African elephant. The overall decline in Africa's elephants finally hit home. In and outside Africa, there was widespread alarm, and a great deal of media attention. Western campaigns such as "Don't Buy Ivory" were hugely influential: from early 1989 the United States, countries in western Europe, Japan, and Taiwan did stop importing ivory.

Many conservationists were convinced that a ban was necessary, but it happened only after prolonged and acrimonious debate. A minority of the 37 African "range states" - countries with wild elephant populations - were

not in favour. Among them were six southern African countries - Botswana, Malawi, Mozambique, South Africa, Zambia, and Zimbabwe. They opposed a ban because they did not consider their elephant populations to be threatened with extinction, and because they reckoned that being unable to sell their ivory would seriously limit their investment in conservation.

These countries were significant because they were estimated to hold about 40 per cent of Africa's elephants. And it was true that some of their herds were well-managed and flourishing, relative to those north of the Zambezi. Partly this was thanks to a tradition of conservation, partly to strong law-enforcement and better land-use planning. South Africa, of course, was relatively rich. But other factors were involved, as Zimbabwe's Department of National Parks and Wildlife pointed out at the time: the southern African countries, they said, actually had too many elephants, and inevitably there had been conflict with humans. Two things, it was claimed, had changed that in Zimbabwe. First, farmers had been given legal ownership of wildlife on their land. And second, the value of elephants had risen enormously - mainly because of safari hunting. The more wildlife was worth, the more space farmers gave it in lieu of livestock and the better they looked after it. The results spoke for themselves.

Central to Zimbabwe's position was the idea of the indigenous farmers' rights over their own wildlife: "the proposed ban of the elephant trade," it was said, "smacks of...the condescending attitude that game belongs to the King, or should we now say the righteous Westerner...". The feeling expressed here, that Western post-colonialists (or other outsiders) have no business telling Africans what to do with their resources, reflects a deep resentment. That resentment still surfaces, particularly when Western governments and organizations do not accompany their advice with financial help, or when they appear to be siding with range states whose elephants are endangered, and censorious of those others whose elephants are not. These were the lines along which, in 1989, the global elephant debate was split; and this further undermined the existing rift within Africa, between those range states that opposed the ban, and those that were for it.

On 18 July 1989, President Daniel arap Moi of Kenya set alight a huge heap of some 2,000 confiscated elephant

tusks, affirming as he did so: "We shall not be part of the ivory trade". Some saw it as a noble, altruistic gesture on behalf of the elephant. Others saw it as an expensive waste of resources and a cheap publicity stunt on behalf of the government.

In October 1989 the ban was passed, but not without compromise. Special criteria were adopted to return stable or increasing elephant populations to Appendix II. And opposing range states had the right to "take out a reservation" against (i.e. register a formal objection to) the inclusion of their elephants in Appendix I. However, with the market more or less blocked, ivory stocks began to accumulate. And as the pro/anti-ban debate smouldered on, with intermittent flare-ups, it was not Kenya's ivory pyre but the stockpiled ivory that became the burning issue.

II. The ivory trade: to ban or not to ban?

The ivory stockpiles - use them or lose them?

Since 1989, with few options other than storage, the volume of ivory legally held by African governments may have doubled. A conservative TRAFFIC estimate gives a figure of 600 tonnes, with the largest stocks found in eastern and southern Africa. There are two difficulties involved in keeping ivory in store. First it has to be secured against theft. Second, it deteriorates over time as it dries out. Stock held in the Sudan, for example, lost 15 per cent of its weight in five years, due to loss of moisture. Namibia, facing similarly arid conditions, has invested in humidifying equipment. Warehousing, plus the cost of such equipment, plus security, plus management - all this adds up to a great deal of money.

These stocks, which used to be reckoned a valuable national asset, have become since 1989 a liability. But if the ivory could be sold on the international market, it would make, not cost, money. That is one way of making elephants pay for their keep - an idea that is the essence of the "sustainable use" arguments which are now central to the issue of wildlife conservation in Africa.

The concept of "sustainable use" is that people should be

able to use a natural resource (animal or vegetable) in any way they can, so long as such use doesn't result in there being no more of that resource. And, bland as this definition is, it is easy to see why the concept is problematic. To begin with, the person using a particular resource - say, a slash-and-burn farmer cutting trees - is not always in a position to calculate whether that resource will in fact survive his consumption of it. Then, as regards the elephant, there are many ways to "use" it: by riding it in the zoo, by photographing it for your pleasure, by eating it, by selling bits of it if you need cash, or by shooting it if that gives you a thrill and if you want a pair of tusks on the wall. "To use" wildlife readily comes to seem "to exploit" it, with all the attendant negative implications.

If this is the reason some people prefer an extreme "protectionist" attitude, which holds that nature should never be interfered with in any way, it is also the explanation of why some are wary of any "utilitarian" policy - one, that is, which might suggest everything is reducible to cost-benefit analysis. The survival of the world's elephants - or, say, tigers - should surely be regarded as good and desirable in itself. Some conservationists feel that in particular the popular slogan "Use it or Lose it!" is too glib, oversimplifying the issues. Yet, for some rural Africans, the issue is that simple: unless they can see a profit in keeping elephants alive, they would be happy to see them all dead.

As an example of sustainable use in practice, Zimbabwe can point to its CAMPFIRE programme, launched in 1989. The term stands for Community Areas Management Programme for Indigenous Resources, and what it means is that fees paid to exploit the area's natural resources go directly to the community in which the use takes place. The government, in consultation with the community, may also set quotas for "trophy" hunting, aimed at ensuring that a very small proportion of the elephant population - less than about half a per cent - is killed in this way. But the fees are very high - up to US\$12,000 for an elephant; and they have paid, in Zimbabwe, for schools, clinics, irrigation, and electricity.

The benefits of the CAMPFIRE scheme have given sustainable use a good press in other African countries (some of which have developed similar approaches). And once the principle

of it is accepted it is hard, logically and politically, to make a case for not allowing people to make a profit out of elephants in other ways. For instance, by selling hides, meat - and ivory.

Downlisting elephants: reaching consensus

The years following the international trade ban saw more than one attempt on the part of certain southern African range states to get their elephant populations downlisted to CITES Appendix II. But although their herds met the downlisting criteria, and despite agreeing to a moratorium on the ivory trade, they failed to find enough support for their proposals. Nevertheless, as ivory stocks continued to accumulate, and conflict between people and elephants escalated, there was a movement towards convergence and common purpose.

In 1996, 32 out of the 37 African elephant range states held talks on a number of related concerns. These included funding for elephant conservation, illegal trade in elephant products, the feasibility of a strictly controlled trade, and the problem of ivory stocks; and the desirability of an African consensus on these issues was underscored.

So when the 1997 CITES conference approached, with the downlisting proposals of Botswana, Namibia, and Zimbabwe again on the table, they had already consulted other range states, had explained their motives, and were anxious to allay fears that any other country's herds would be endangered. Trade was to be from existing stocks only, of known origin (deriving from natural deaths, problem animal control, culls, etc.). Exports were to be subject to strict quotas, and to one country only, Japan (this in order to facilitate the necessary controls). "No elephant has to be killed for what we want to do," emphasized Namibia's spokesman.

Maybe so. But in other African range states there was still strong opposition to the downlisting. It was claimed that the ban was working, and figures were cited to support this which sounded and, where verifiable, were indeed impressive. For example, Kenya's herds had gone up 30 per cent between 1989 and 1997. One can compare its count of only 35 elephants lost to poachers in the year 1995 with Tanzania's figure of 70 lost per day before 1989. Thanks

to the ban, it was claimed, entire elephant populations had been spared destruction. The point that the downlisting only applied in certain countries was, it was argued, immaterial: poachers would get the message only that the ban had been lifted, and take aim accordingly. Furthermore, any legal trade in ivory could serve as a cover for the black market; and, for as long as ivory prices fuelled it, illegal trade would outrun the funds to control it. To ease the ban was a huge risk, declared at least one non-governmental organization (NGO).

It is important - especially for non-Africans - to realize that within Africa, conflicting views on the ban have had a marked regional bias, which has to do with the relative numbers of elephants, relative poverty, with historical, political, and other factors. Countries in East and West Africa, possessing relatively few elephants, lacked the resources to protect their herds adequately, and tended to support the ban. In Kenya, voices were raised calling on the southern African states to act altruistically and, by forgoing ivory revenue, preserve the herds of poorer countries and "save the elephant for Africa". But other voices pointed out that if eastern Africa had not lost all its elephants, other countries would not be suffering so much.

So the arguments went back and forth. There was common ground, certainly: every country wanted to keep its elephants. It was also agreed that no single solution would work for every country. There was also a trend towards conciliation and negotiation. But beyond that, any observer in any of the states concerned could take his pick between plausible hypotheses and irrefutable realities; between idealism and cynicism; or between flamboyant rhetoric and cautious "if"s and "but"s. And amidst all this, against a background of enormous uncertainty (would the slaughter recommence?) sat the irrefutable facts: Botswana, Namibia, and Zimbabwe had plentiful elephant herds and their proposals met the CITES downlisting criteria. So what was to be done?

The 1997 Harare conference: tears and cheers

Like past CITES meetings, the 1997 conference in Harare, Zimbabwe, was dominated by the African elephant. In the run-up to the event, passions rose. There were accusations

(not unusual on these occasions) that African delegations were being threatened with withdrawal of aid by anti-downlisting governments or other factions; accusations, too, that pro-downlisting states planned to withdraw from CITES if they failed (they denied any such intention). Animal welfare organizations pointed out that they had a legal obligation to their contributing members not to sanction any killing of elephants - something which "most people generally and in the US [specifically]" were against in principle. In vaguer terms, some organizations also declared there to be no incompatibility between the protection of species and human welfare. Such statements provoked a strong reaction. "We are the ones who are being affected and sharing land with wildlife, " said a spokesman for communities in southern Africa. "The animals are surviving because of us, so in return we feel we have to benefit from them." He, and other African delegates, considered the animal rights lobby as deplorably biased and lacking in realism; or as one of them put it: "They prefer animals to human beings and some say the elephant is so innocent it should not be killed. They want Africa to be preserved as a big national park for them to come and see wildlife like a zoo." There was also bitter talk of neocolonialism and dictating to Africa what Africans should do.

Meanwhile, although voting took place by secret ballot to obviate intimidation, it was possible to track the emerging consensus between African nations. The success of the pro-downlisting governments in managing their elephants and the need for financing new conservation initiatives was certainly acknowledged by other range states. However, formal consensus was not obtained until, after the narrow defeat of an initial proposal, a compromise was found which imposed tough preconditions for any resumption of the ivory trade. (See box page 20.)

The decision to downlist Botswana, Namibia, and Zimbabwe's elephants was finally voted through on 19 June 1997, by a large majority. Nonetheless there were a significant number of abstentions, and, as noted by the Harare press, tears as well as cheers. India and Nepal expressed concern that any reopening of the ivory trade would further endanger their own elephants. Inevitably, some reactions were emotional. It was "a tragic day for elephants", said an animal welfare society official. Lifting the ban was "a stupid, arrogant

and selfish gamble," wrote the East Africa journalist, Sam Kiley. Others however were more conciliatory and forward-looking. The Kenyan conservationist David Western stressed Kenya's part in demanding stringent preconditions to the agreement, which "put conservation concerns to the fore without penalizing successful countries wishing to benefit from sustainable use of wildlife". And he accepted the outcome as a pragmatic decision reflecting "a broad consensus that had previously evaded Africa". While Don Barry, the head of the US delegation, which voted against the downlisting, concluded: "What we all need to do now is roll up our sleeves to help protect the African elephant. For the sake of the African elephant, we can't afford to fail."

After Harare

The battle over, it remains to win the peace - in this case, a future where elephants and human beings can coexist in harmony. And that means making a realistic appraisal of losses and gains.

There is a risk that easing the ban could send the wrong message to poachers and give a fresh impetus to the illegal ivory trade. But it has to be appreciated that the ban was never in itself a complete solution. Studies have indicated that, within a few years of its enactment, poaching was still widespread, and might even in some countries be on the increase - a thesis corroborated by clear evidence that the black market continued to flourish. Still less was the ban a complete solution to the whole, multi-faceted issue of elephant conservation in Africa. Now, with the total ban gone, so is the temptation to let everything else hang on it and to guarrel over it with neighbours whose ultimate aims are essentially the same. What has happened instead is that out of the different experiences and expectations of the range states has come an invaluable "dialogue process" - in other words, talking not fighting. The result of this process, and of the 1997 CITES conference itself, was a blueprint for elephant conservation and trade very different from anything that had preceded it - and (let's not forget it) a democratic vote in favour of taking the downlisting risk.

Finally, the 1997 downlisting decisions are not irreversible - nor indeed operational until stringent

safeguards are in place. Harare '97 was by no means the end of the story. Those involved are looking again to the future. Where lies the way forward now?

Putting an end to the slaughter

Amid the differing viewpoints at Harare, one thing was and remained clear: all sides want the illicit trade in ivory to be checked. This is largely a matter of controls and law enforcement, and ensuring that the demand for ivory does not outstrip supply or create the incentives for illegal off-take and trafficking. In most of Africa's elephant range states, wildlife protection laws need to be strengthened and better enforced, which entails game wardens and rangers being better paid and motivated. Globally, too, pressure for tougher wildlife legislation would strengthen CITES and reinforce its authority.

But it is also important to work out, at a given time or place, the pattern of illegal killing: how many elephants are dying? Of what cause? And if shot, for what purpose and for whom? In 1997, the Parties to CITES required the establishment of comprehensive monitoring systems to determine these factors, as well as to track the trade in elephant products. In March 1998, following recommendations from TRAFFIC and the IUCN Species Survival Commission, the CITES Standing Committee agreed that the system for monitoring elephant killing should include representative sites within both African and Asian elephant range states. On the trade front, TRAFFIC's Bad Ivory Database System (BIDS) would be expanded to monitor trade in all elephant products (see box this page).

It is unrealistic to pin any hopes on stamping out all demand. Traditions are too deeply entrenched. Funds are better spent on efforts to eliminate illegal trade and protect elephants in the wild. Money - and the will to do so - has to be found.

All the elephants you ever wanted?

Let us then be optimists and suppose that poaching on the grand scale is eliminated: Africa's elephant populations are reproducing vigorously, especially in protected areas. And, as has happened in, for example, Kenya's Amboseli

Park, they have seriously damaged the area's woodlands and consequently its biodiversity.

Moving some of the elephants - expense apart - is, as already explained, just moving the problem elsewhere. Contraception is another possible solution, but expensive, and complicated by our still relatively limited knowledge of elephant reproductive physiology. Research at any rate is not widespread, though contraception may in the long term prove useful in small, closely-managed populations.

The alternative to these methods of population control is culling, something routinely practiced all over the world by farmers to reduce herds of cattle, sheep, deer, and so on. While one may dislike the idea of killing elephants, culling, carried out by an expert, presumably causes an elephant less suffering than dying of starvation. Culling is done to achieve a park or reserve's "preferred management density": that is, the number of elephants it can comfortably hold in relation to one another and to the rest of the area's fauna and flora. What density will work depends on a number of factors, including the size of the place, rainfall, surface water, vegetation, and so on. Only the relevant wildlife authority is in a position to make this decision.

A preferred management density at least represents a definite conclusion, a figure, a ratio, whatever may be the ethical choices involved in attaining it. But some 80 per cent of the African elephant's range lies outside protected areas; and this is where the questions get really tough. How many elephants are there in all Africa? Where are they, and when they are on the move where are they going? Without the answers, how can ecologists make the vital equation between numbers and habitat resources on which the viability of populations depend?

A lot of money therefore is needed for survey equipment and other costs. Without the money there is too little information; and if, in the future, conservation professionals find themselves having to make hard choices to protect, not all of Africa's elephants, but this or that specimen population (on grounds of size, or ecology, or simple viability) - then they would like those choices at least to be well-informed.

Monitoring elephant numbers and distribution has a dull ring to it, certainly. It is much easier to say "forget it - let them roam free, unnumbered, numberless".

Unfortunately, the larger question of how many elephants we elephant-lovers may think we want in Africa - elephants ad infinitum? - is rendered purely hypothetical by the situation on the ground there. In parts of the Earth that can barely feed a human population, is there any room for a creature that can eat 300 kilos of vegetable matter every day?

It is also perfectly understandable why those of us who run no risk of finding such a creature in our back yard should want other people to make space for elephants. But it is precisely this attitude which is most counterproductive at the actual interface of human-elephant conflict. As a Namibian Minister of the Environment put it: "The gap between perceptions of elephants internationally and locally is widening, with increasing numbers of local people regarding the revered animals of Western fantasy and wonder as irredeemable agricultural pests, and obstacles to their development."

Dealing with troublesome elephants

The "irredeemable pest" is, of course, innocent, in the sense that it is only behaving naturally; but that is not a reason which farmers in rural Africa (or anywhere) would accept for protecting it in all circumstances. It is not a question of being innocent, but of being a pest. The spokesman of a Western animals rights organization which was accused, at the Harare conference, of putting animals before people, countered by asking, which takes first place, your first child or your second child? - an approach that circumnavigates the point, which is that one's second child is not normally in a position to destroy one's livelihood. Marauding rats are innocent too (and incidentally among the most intelligent of mammals), yet there is little outcry on behalf of their rights.

Many practical ways of reducing human-elephant conflict are currently being explored. These range from deterrent sprays based on irritants such as capsicum (red pepper), to physical barriers for protecting crops. The latter are, it seems, most effective on a small scale: fencing individual plots to keep elephants out works better than putting barricades round reserves to keep them in.

"Problem animal control" - i.e. dealing with habitual cropraiders - is best delegated to official wardens trained in humane killing with firearms. This system has the advantage of accountability: it is known who is responsible for the elephant's death. One drawback is that if the warden is not on the spot, the wrong animal may be killed. The other drawback is the dearth of training capacity.

There are compensation schemes that pay farmers for crops or livestock destroyed, but these are expensive, owing to administrative costs and a high rate of fraudulent claims, and are widely discontinued.

It could well be that the more people resent the presence of elephants and feel that the government is preserving them at their expense, the more they will be inclined to sidestep government controls and abuse compensation schemes. What is at any rate clear is that the survival of the African elephant outside protected areas now depends to a very great extent on the goodwill of the communities with which it must share living space. And - which is less obvious, but still something with which many conservationists would now agree - the best way to ensure that goodwill is by fostering schemes which turn elephants from liabilities into assets.

Hunting, tourism, and the profit motive

Programmes like Zimbabwe's CAMPFIRE aim to provide rural communities with optimal financial return on wildlife, which in some cases is their locality's only valuable natural resource. But how should that return be optimized? Those in favour of an ivory ban may make the point that profits on an elephant are not maximized by trading in ivory, but can be through tourism ("non-consumptive use"). Others argue that an elephant is worth far more for its meat, hide, and to sportsmen seeking a "trophy" ("consumptive use"). Elephant hide (formerly sought-after in Texas for making cowboy boots) is surprisingly valuable. In 1997, Zimbabwe had stockpiled hides estimated at over US\$100,000; it argued for, and won, the right to resume trade in them.

It is not thought that trade in hides encourages poaching: they are too cumbersome to deal with and transport for an operator on the run. It is the case, though, that a

significant number of Zimbabwe's hides are a by-product of sport (trophy- or big game-hunting), and that many people find the idea of hunting for sport distasteful, if not abhorrent. Attitudes to hunting tend to depend on whether one thinks in terms of the individual (the animal killed, or perhaps the personality of the hunter), or of the multitude. In terms of benefiting elephants and Africans as a whole, sport hunting does have a potentially important role - if it is strictly controlled by permits and quotas. In Kenya in the 1970s it was not: any hunter happy to deal in bribery and corruption could shoot many more animals than he had a license for. Wildlife already hit hard by poaching was hit even harder. Hunting was therefore made illegal, and other range states followed for similar reasons.

At present some range states ban elephant trophy-hunting, others do not. Most African-wildlife experts are not against sport hunting in principle, because the number of elephants killed is so small and the returns so large, especially on land unsuitable for other use. But there has to be the will to enforce the quota systems. A crucial question from the conservationist point of view is, who will benefit from trophy-hunting revenues? For large landowners it is not an issue: they will, and sport hunting can be easily their most profitable concern. But for poor people it depends where you are. In Kenya, it was argued recently, neither local communities nor elephant conservation would see any of the money. Conversely, in Namibia, Tanzania, and Zimbabwe, some of it is required by law to go to the local community. In Tanzania, one study has shown that people throughout the elephants' range benefited more equitably from sport-hunting revenue than from tourism, revenues from which stayed mainly in the north of the country.

Tourism, unlike hunting, does not on the face of it need to make a case for itself. Governments love it because it brings in revenue and raises a country's profile; Westerners love it because it's fun and elephants don't die because of it; safari operators for obvious reasons love it. All the same, big-game viewing in Africa is not an unmixed blessing.

Tourism is good for elephants because it puts a high value on them that affords them goodwill and protection. For rural Africans, the benefits are more equivocal. Some of them are employed as guides, drivers, and hotel staff. But in other cases where local tribespeople (perhaps evicted from a game reserve) earn a mere pittance having their pictures taken or performing tribal dances, their relations with

tourists can be mutually degrading. Tourism can also foster the damaging idea that enjoying wildlife is a white man's game.

That is why there now exist in many range states initiatives designed to ensure local communities receive benefits from neighbouring wildlife reserves - meat from culls, camping fees, jobs. Not packets of chewing-gum and second-hand teeshirts!

Tourists bring their habits and expectations with them. Catering for them in large numbers demands good new roads and hotel complexes (in contrast to sport hunting, which needs little infrastructure, roughing it being part of the experience). Tourist accommodation can ruin the view, draw heavily on a water supply which may be low at the best of times, and pollute it with sewage. Long convoys of jeeps descend on the game reserves, churning up the tracks, leaving litter. Animals at waterholes are encircled by cameras and predators followed when they try to stalk their prey. Often, they have lost their fear of humans. The wilderness is tamed, and wildlife no longer wild.

If mass tourism is not to do irreparable harm to the environment - and defeat its own object - safaris must be well-controlled, or conducted on a smaller scale, with all possible concern for the environment and for the needs of local people. In Namibia, for example, where such so-called "ecotourism" is being developed, villagers have opened camp sites and craft markets, and are encouraged to negotiate directly with tour operators, so as to retain some control over tourist activities, and profit by them.

Lastly, as concerns elephants, no kind of tourism will profit those who inhabit areas where tourists do not go - perhaps because the climate is unpleasant, scenery dull, or travel difficult, or on account of political instability and civil unrest. One or other of these factors applies in particular to parts of western, and central African range states. Here, no catering to the tourist trade is likely ever to bail the elephants out.

In an overstretched economy there may be little incentive to invest in elephants. As a natural resource, they make huge demands on other resources like water, land, and vegetation, and their needs may conflict with those of local people. Nevertheless, if governments want elephants to survive, they must make a positive investment in them. That requires not only considerable funding. It may also entail altering socio-economic structures. But the costbenefit ratio must be adjusted so that people and governments perceive the elephant as a living asset. One way or another, the African villager has to be convinced that there is more to be gained from a protected elephant than from one that is illegally killed.

Progress, problems - and paying up

The problems of conserving Africa's elephants are numerous, complex, and have been further complicated by lack of funding, lack of foresight, political considerations, and popular attitudes. Solutions must be sought partly in better management of herds, partly in stricter lawenforcement, partly in bringing about a change in attitudes. If rural Africans need to understand that it can pay to conserve elephants, likewise we in the industrialized nations need to understand that, if we want elephants conserved, we must pay, too.

The solution or set of solutions that works in one area will not necessarily work in another. Circumstances in the range states vary widely - in numbers of elephants, in the value put on them, in legislation, in capacity to enforce the law, and so on. Conflict between people and elephants may not be a significant consideration in Zambia, yet be the main management issue in Kenya. The law may hit illegal hunting hard in Zimbabwe, but not in the Côte d'Ivoire. In Cameroon, where elephant meat is particularly popular, the poacher may be more interested in that than in tusks. In elephant management, the watchwords are flexibility and adaptability.

The ivory trade ban had a dramatic effect in some regions, but was not a peg on which to hang every other problem. A more definite link has been found between elephant deaths and lack of investment in protection than in elephant

deaths and the ban on trade. The illegal killing of elephants cannot properly be considered in isolation from problems of funding and management. If the farmer is desperate to get rid of elephants, and feels officialdom is not interested, he has every incentive to collaborate with the poacher - or to become one himself.

To stop that happening, governments need to make the necessary investment. An initiative by central African range states to set aside large tracts of forest as natural parks exemplifies one type of investment decision. If conflict with elephants is to be averted, there has to be a policy of land-use planning at the national and local level. If sustainable use of elephants is to be the guiding principle, a legal framework needs to be established to give local communities rights - as user or owner - over their natural resources, so that they become beneficiaries of, for example, hunting or tourism. In the village, the priority might be to set up a community-based wildlife management programme. Training personnel and educating local people about natural resource management will be necessary. All of it needs a massive input of funds. The way to get rid of a poacher is to turn him into a gameguard (or a conservationist). But it will not work if he is not paid.

For the tangled issues of illegal off-take and bad management always unravel at the same point: lack of cash. But where is the money to come from - given the demands of Africa's human population, and if the nations concerned face problems such as debt, disease, and warfare? Civil instability, lack of accountability, and endemic corruption are features of several range states, and do not attract foreign investors.

It is in the context of the funding crisis that the ivory stockpiles continue to be an issue. The proposal put forward at Harare (see box page 20) of a one-off non-commercial buyout of all stocks by the donor countries affords a short-term solution and could potentially generate significant funds for conservation, particularly for those countries with large declarations - although even countries with small stocks stand to benefit. In March 1998, CITES accepted TRAFFIC's audits of these stocks and, as a consequence, 14 African countries became eligible to participate.

Still, less than half of the range state stocks were declared by the September 1997 deadline, and of those the vast majority belonged to just two countries, Tanzania and Namibia. Stocks will also continue to accumulate. This means that the issue has not been resolved indefinitely, but an important first step has been taken. Its success will depend upon the willingness of donors to help. The deal need not necessarily involve hard cash for ivory but could be a pledge to assist the country's elephant conservation efforts in some other concrete manner.

There is no single or obvious solution, then, to the continuing stockpile problem. It must not be allowed, however, to overshadow other important factors in the elephant conservation equation that are increasingly evident since Harare. Very real progress has been made through the dialogue and growing mutual understanding among the range states. The importance of successful management was recognized. Polarizing the issues between rich and poor or range states and developed nations was seen as no longer relevant (the final vote was a reflection of this). Most evident of all, perhaps, is the obligation on the part of the industrialized nations - if they wish to be involved - to provide the funding where African nations cannot.

In 1989, when CITES put the African elephant on the official danger list, the donor nations and conservation organizations urged the range states to produce Elephant Conservation Action Plans, which most of them did. Yet funding promised by the donor nations never materialized. This failure was specifically noted in the context of the 1997 CITES decisions. The point is obvious, but it needs re-stating: to try to tell African nations what they should do with their elephants without providing the necessary financial support, or acknowledging the difficulties these countries face in ensuring the well-being of people as well as elephants, is not merely counterproductive, it is also unfair and indeed hypocritical.

Surely, it is not asking too much of the donor nations to concede that Africa's elephants are Africa's affair, without denying expertise and funds to be used as Africans think appropriate. Just as it should not be too much to ask that African nations be accountable for those funds. Responsibility for the elephants goes both ways.

And that responsibility stops, finally, with the individual, which includes each one of us whose contribution, directly or indirectly, enables a nation to become a donor nation. If, understandably, we feel anxious about the fate of creatures on a distant continent we perhaps know little about, we can make it our business to try to understand the situation in Africa in so far as it affects elephants, and to empathize with disparate African attitudes concerning them.

Appreciating how those that live with elephants feel about them could lead on our part to a clearer appraisal of our own attitudes, conditioned by quite different factors. The elephant in the wild plays no part in our daily lives or economy: for us, it represents a luxury - something that caters to our fantasies, or simply to the feel-good factor. And, as such, if we want it, we must pay for it. African nations at present simply cannot afford the huge investment in elephants that is needed. Those of us who have money to spare must help.

Typically, these days, in the developed world, in a Comfortable home, a child's bedroom will be littered with stuffed toys - an elephant, a seal, a polar bear. If we can afford these little luxuries, well aware that they perpetuate the myth of wild animals as cuddly companions (and it would be ridiculous to object to that) then we can also afford something to help protect the real thing. And though it may not be inspiring to think of money directed to conservation being spent on monitoring equipment or counting dung-piles, letting go to some degree of romantic or sentimental fantasies is part of the price we must pay.

The one luxury - or self-indulgence - that we cannot permit ourselves is that of adopting any extreme position which entails giving up our responsibility. It must be recognized that there has to be a middle way between wanting all elephants dead (as some rural Africans do) and letting them proliferate unchecked (which some Westerners want). That way lies in integrating the elephant into the world it must share with human beings and other forms of life. Which means not only finding room for it physically, without upsetting the balance of nature, but finding room for it within the human economy without reducing it to the status of a mere convenience. The problems are practical, but also intellectual and philosophical.

The difficulty and cost of such an undertaking cannot be exaggerated. Nor will the task ever be complete, because the interaction between man and the natural world is continually evolving. But that is the challenge. Only by meeting it will the African elephant survive as we would want it to survive: to represent something meaningful in our children's future (grandeur, mystery, call it what you will) - something that one last lonely specimen in a zoo never can.