Elephant Politics in Southern Africa

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1. Introduction

When last year a public outcry, well orchestrated by South African and Northern Hemisphere NGOs accompanied the capture and subsequent taming of 30 juvenile and subadult elephants from an overcrowded reserve in Botswana, and when, due to actions of animal rightist groups, the transport of seven of these elephants to three European zoos – including Basel – was made extremely difficult, zoos became aware that they had to face a new problem, the changing attitude of the general public towards elephants.

Having been involved in elephant politics for more than a decade, I would like to give some background information that may help you to better appreciate elephant–related problems in Southern Africa.

2. The development of the Elephant population in Africa

In 1989, NGOs claimed that the African elephant was a highly endangered species, that its pan-African population amounted to 300'000 heads only, and that the stocks were rapidly declining. This reflected an intentional pessimism aimed at supporting the transfer of the species from Appendix II to Appendix I of CITES. Although not correct at all, this propaganda determines the public perception until today.

In fact, no one knew exactly how many elephants survived on the African continent, and there were only vague speculations about the historical numbers of the species. For 1993/94, a total figure of 550'000 to 580'000 was published by IUCN¹ on the basis of the best available information which still contained many extrapolations and guesses. Possibly, the real number is somewhat higher, but no one would contest that, in long-terms, the species is declining.

There are, however different regional trends:

In Western Africa, the population is more or less stable or slightly decreasing, total numbers are, however very low.

In **Central Africa**, there was a marked decline in the 1980ies. In reality, a large portion of this decline was virtual, because it was due to new models to calculate the populations.

In **East Africa**, there was a massive, real decline, e.g. elephant populations in Kenya dwindled by 85 % during the period 1973 to 1987, and in Tanzania populations were reduced by 53 % from 1977 to 1987. After the introduction of the ivory trade ban, the wildlife administrations undertook serious efforts to better protect the elephants. As a result, the negative trend was stopped and regionally even reversed.

In **Southern Africa**, there was a marked negative trend in Zambia. The small elephant population of Malawi was declining too, and there was no reliable information from Angola and Mozambique. On the other hand, there were clear increases in Botswana, Namibia, South Africa and Zimbabwe, and a small elephant population was re-established in Swaziland.

The general decline of the pan-African elephant population goes along with a decrease and fragmentation of the range. This trend exists since a long time, and it will unavoidably continue as the human population in Africa increases. It is, however, not contested that an accelerated loss of populations and distribution range took place in the 1980ies, and that this was due to illegal hunting for an unsustainable ivory trade.

3. The African Elephant and CITES

When, in 1973, CITES was concluded in Washington DC, the African elephant was not listed in its appendices. The species was considered to be safe and fairly abundant. However, already in 1976, at the first Conference of the Parties, the elephant was included in Appendix II following a proposal submitted by Switzerland.

Under the impression of a rapid regional decline of elephant populations and an illegal ivory trade, still flourishing in spite of improved controls, the Conference of the Parties decided, in 1989, at its Lausanne meeting, to transfer the African elephant to Appendix I. This was opposed by the Southern African countries which had pre-

¹ the African Elephant Specialist Group of

sented a counter proposal to the effect that the Southern African elephant populations should remain in Appendix II with a temporary moratorium on ivory trade and subsequent ivory exports being subjected to quotas.

Although quite reasonable, the Southern African position was turned down by the USA and the majority of EU countries, merely for reasons of internal politics. The Conference transferred the whole species to Appendix I, and tried to accommodate the Southern African concerns by establishing the Panel of Experts procedure, intended to facilitate the re-transfer of national elephant populations to Appendix II.

In practice, things were not so easy, Botswana, Namibia and Zimbabwe succeeded in1997, only with a proposal to downlist their elephant populations. With overwhelming majorities², the Conference of the Parties decided at its Harare meeting a conditional transfer to Appendix II of the three populations, allowing for trade in live animals to appropriate and acceptable destinations, in defined quantities of raw ivory to Japan and, in the case of Zimbabwe, in raw hides, leather articles and non-commercial shipments of worked ivory.

The raw ivory, close to 60 tons, would come from existing stocks, and it should be exported in 1999 in one shipment per country, and only after certain safeguard measures had been put in place. The proceeds from the sales will have to be reinvested into elephant conservation and in development projects for the benefit of the rural population that has to live together with the elephants.

Simultaneously, the Conference of the Parties adopted a resolution listing a series of conditions that must be fulfilled before the ivory trade could be resumed. The Conference decided also on safeguard measures to be taken in case the trade between the three countries and Japan would stimulate poaching in other regions of Africa.

At its February 1999 meeting, the Standing Committee noted that the range states and Japan had met all conditions, and gave green light for the transaction. The auctions took place in April, and in June the ivory was shipped to Japan under international control. Until May 2000, no more trade will take place, and any subsequent quota must be approved by the Conference of the Parties.

Several animal rights organisations were not prepared to accept the decision taken at Harare. Their fundamental disagreement, and not their concern about the welfare of the animals, may have been the reason for them to try to prevent the shipment of the seven Tuli elephants to the zoos of Basel, Dresden and Erfurt.

4. To protect or to utilise?

When Africa was still a wilderness, only sparsely settled by humans, there was a balance between elephants, vegetation and other animals that was maintained by large scale migrations of the megafauna. Today's reality is different: There are no longer civilisation islands in an endless wilderness, but the wilderness has been reduced to islands in a sea of industrial and agricultural land.

In 1999, more than 650 million people lived in Africa, and in many countries the annual population growth reaches 4 %, meaning that the human population doubles every ten years. In South Africa for instance, there was a tenfold increase of the human population within the last 100 years.

People keep domesticated animals - in South Africa alone 13 million cattle, 33 million sheep and countless goats, the biomass of the wild herbivores is absolutely negligible compared with that of their domesticated relatives, and the elephant's space requirements conflict almost everywhere with the needs of the growing rural population. Where elephants live, they cannot cultivate crops. In arid areas, there is a competition for water, and in place the elephants even enter the villages at night and empty the warehouses, and human fatalities are increasing. Therefore, rural people do not perceive elephants as gentle giants that have to be preserved what ever the costs, but as a threat of their livelihood.

Total protection implies that there are no tangible benefits from the elephants, but the animals continue to cause damage. As a consequence, they are driven out of the areas utilised by humans. They have to move into conservation areas. The range becomes fragmented and the former migrations are impossible. If, however, the elephants are confined to a reserve which they cannot leave, their population will grow until they have destroyed there habitat. Then follows the big collapse. The prime example for this phenomenon is Tsavo National Park in Kenya, where in the 1970ies more than 9000 elephants have died from starvation. This event has lead to the fundamental discussions on how to best protect elephants, whether by an active management or by a laissezaller policy.

I now want to inform you, from my own limited experience, about the elephant conservation policies of South Africa, Namibia and Zimbabwe. The three concepts are all different, but all successful.

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² of 74 to 77 in favour and 21 to 23 against

5. South Africa

When, around 1650, the colonisation by white settlers began, the elephant was widely distributed in South Africa and may have had a total population of 100'000 to 150'000 heads. The settlers displaced the elephants successively towards the East and North, and in 1910 only about 100 elephants survived in remote areas of the country.

In the Eastern Cape a few animals survived in the hills around the village of Addo. These hills could not be used for agriculture, because there was no water. However, there were farms around the hills, and the elephants caused considerable damage particularly on citrus crops. In 1919 a campaign to exterminate the animals was initiated³ until, in 1931, the **Addo Elephant National Park** was proclaimed and the remaining 11 elephants were chased into the park. The conflicts with the farmers remained however, and the growth of the herd was slow, because many animals were shot.

In 1954, the problems were settled by the erection of an elephant proof fence. The result was something like a huge zoo, but at least the elephants got the chance to increase their population. And in fact they were very busy in this respect⁴. As from 1991 it became necessary to enlarge the park to accommodate the growing elephant population. Currently, there may be about 250 elephants in the park. It is again fairly crowded, and more land has to be purchased at enormous costs.

Kruger-National Park is about half the size of Switzerland. It is the largest conservation area of South Africa. In 1912, the land which later became Kruger Park was home to no more than 25 elephants. Well protected, the elephant population grew steadily, and reached 8821 animals in 1970. The SA National Parks decided that these were more than the vegetation could sustain, and decided to intervene.

A prerogative for an active elephant management is a good knowledge of population size and population trends. Therefore, SA National Parks undertook total annual counts by helicopter. Until 1995, it was attempted to stabilise the population at 7500 heads. This implied that some 500 elephants had to be removed per year. The procedure was the following: A group of elephants was driven by helicopter to a pre-selected place where the ground crew is waiting.

In 1991, when I was there, the animals were immobilised from the helicopter and subsequently shot into the neck by the ground crew. In recent years, the procedure was changed, and the animals were shot from the helicopter. The animals are bled and eviscerated on the spot, and then the carcasses and the emptied bowels are transported to the Skukuza By-Products Plant where the carcasses are butchered. The meat is either processed into biltong which is consumed locally, because Kruger NP is in the Foot-and-Mouth Disease zone, or it is canned. The bones and other waste are processed into animal feed or fertiliser at the rendering division of the plant. The skins are salted and dried. Since the elephant is listed in CITES Appendix I, they can no longer be sold. Currently (1999), more than 100 tons of dried skins, representing a dead capital of more than 2 million Swiss Francs, are stored at Skukuza at plus 40 degrees Celsius. On an average 874 tusks with a total weight of five tons resulted from the annual culling operations. These tusks are marked, disinfected and stored in a strong room at Skukuza, until they can be auctioned.

When entire herds are eliminated, the juveniles are often caught alive and are either exported to zoological gardens or, since 1979, used for reintroduction projects. Although one can assume that these animals were traumatised by the culling operation, and although the newly established groups consisted exclusively of inexperienced youngsters of about the same age, the animals settled well in their new surroundings. They survived, showed a normal behaviour intraspecifically and against humans, and started, as from 1990, to breed.

The young populations are rapidly growing, and one has already to think about how big one would let them grow, because in two parks conflicts between elephant bulls and rhinos were experienced, resulting, until 1998, in the loss of more than 30 rhinos. The reasons for this agonistic behaviour are not clear. In Pilanesberg the elephants had tried to mate with the rhinos which was not the case in Umfolozi-Hluhluwe. In an attempt to prevent further damage, adult males were recently brought into Pilanesberg hoping that they would keep the youngsters under control.

The transport of adult animals became possible in 1993, when for the first time in Zimbabwe a new combination of drugs was used to sedate the elephants during the whole translocation. In that year no less than 189 elephants were transported as complete family groups from Gonarezhou National Park to Madikwe Game Reserve in the NW Province of South Africa. On this picture, taken in September 98, you can see that the elephant group shows a normal age structure.

From 1979 to 1994 more than 1000 elephants have been translocated in South Africa. More than 50 new popu-

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³ More than 120 elephants were killed

⁴ In 1984 the herd comprised already 118 animals.

lations have been created, and today South Africa has about more than 12'500 elephants living on an area corresponding to the size of Belgium⁵.

A prerogative for the introduction of elephants into small and medium-sized reserves are elephant-proof fences. Because these reserves are surrounded by commercial farms or by communal land with the villages often only a few metres from the park boundary. Neither the rural communities nor the farm owners would accept an introduction if there were no fences confining the elephants and protecting their crops.

In a long run, the South African elephant population will stabilise somewhere above 15'000 heads, i.e. about 10-15 % of the original stock. With a few exceptions, the entire elephant range will be surrounded by fences, which will effectively separate elephant land from farmers' land. The fences will prevent elephant migrations. As a result, the confined populations will have to be kept stable by management measures. Most likely, management will mean the culling of 900 elephants per year, whether we like it or not. Whether we like it or not, also more than 8 tons of ivory will be collected each year, representing a value of more than 8 million rand, as well as hides and other by-products. Following heavy lobbying by animal welfare and animal rightist organisations, experiments were conducted at Kruger Park to prevent reproduction by applying hormones to the elephant cows. It became, however, soon evident that the effort required to keep 1000 elephant cows permanently under contraceptives would be too huge, that it could not be financed and that it may have negative impacts on the social behaviour of the elephants and the structure of the elephant population. Therefore, it was decided to cull again, in order to reduce the stock by 650 animals in 2000.

6. Namibia

In the early 19th century, elephants were found everywhere in Namibia, except in the water- and treeless areas of the Skeleton Coast, the Namib and the Kalahari. As a result of intense hunting and farming activities by white settlers, the elephants were pushed to the North. At the beginning of the 20th century they were restricted to the Kaokoveld and the Caprivi⁶. Around 1970, there were still less than 2000 elephants in Namibia. Today, there are more than 10'000. The increase took largely place in the Caprivi area, where the population is contiguous with the dramatically increasing population of Botswana, which numbered 106'000 in March 1999.

Because most of Namibia is extremely arid, the population density is much lower than in the other Southern African countries. To find sufficient food and water, the elephants have to move over long distances, often following dry riverbeds. In doing this, they ignore the non-electrified fences, and leave the conservation areas. This leads regularly to conflicts with herdsmen at waterholes, and results in the occasional shooting of problem animals.

In the Etosha National Park, the Kaokoveld and Damaraland the elephant population is controlled by food and water shortages and by anthrax, and remains fairly stable. There are no interventions necessary, and the only ivory collected originates from the few problem animals, and from elephants that died naturally or had been poached. in the eastern part of the country, about 20-30 elephants per year are shot by trophy hunters. There are no plans to intensify hunting in the future.

7. Zimbabwe

At the beginning of this century, there were probably less than 5000 elephants left in Zimbabwe. The population began to increase the 1920ies when the first conservation areas were proclaimed. In 1960, the national count amounted to 32'000 animals. At about this time, the first negative impacts, such as loss of big trees, turning of woodlands into steppe, and erosion were noted. In an attempt to stabilise the population, entire herds were culled. From 1960 to 1991 a total of 46'775 elephants were eliminated. In spite of these efforts, the population grew to 78'000 (+/- 14'000) animals in 1991. Today, the combined Zimbabwe-Botswana-Eastern Namibia population comprises closeto 200'000 elephants.

85 % of Zimbabwe's elephants live in conservation areas. There, the average density is 1.5 elephants / km². This is about four times higher than in Kruger National Park. The impact of this elephant density on the vegetation of the parks is considerable, as for instance at Gonarezhou National Park. Close to waterholes, there is no grass left and all trees have been destroyed by the elephants. Over large tracts of land all trees have been broken by the elephants at a height of 1 to 1.5 meters. Particularly dramatic are the effects on the baobabs. I spent a week in Gonarezhou, and I didn't see a single intact baobab. In the interest of the conservation of this tree species, the elephant herd of the park should be reduced from 6000 to 3000 animals, which, of course, would be heavily opposed by animal welfare and animal rights people. My personal view is, however, that baobabs are

⁶ based on incomplete information

⁵ 30'000 sq.km

as important as elephants, and that the park should be managed in a way which ensures the survival of both species.

Like in South Africa, use is made not only of the tusks, but also of the meat, the skins and the bones proceeding from culling operations. In the framework of CAMPFIRE, the Communal Areas Management Programme for Indigenous Resources, the local population profits directly from the elephant management.. As a result ,and in contrast to South Africa, the elephant range is much larger than the conservation areas, although densities are relatively low on the communal lands.

In Mahenye, a village bordering Gona-re-Zhou National Park, poaching has been greatly reduced since the village participates in the CAMPFIRE scheme. Thanks to the proceeds from elephant trophy hunting by foreigners, the villagers have got a legitimate source of protein, the village obtains money from the trophy hunting fees, and several jobs have been created by a small safari industry. The number of elephants hunted in this community is very low, one two four animals per year, but the benefits are considerable: Among other things, the village got a grain mill, a new school and electricity. The lower jaw of one of the first elephants hunted tells the kids every day who has paid for their new school house.

The total revenues of CAMPFIRE from trophy hunting are considerable, and the elephant accounts for 28 to 100 % of these revenues, according to district. Without trophy hunting of capital bulls by foreigners, and culling of female herds by, or supervised by, the National Parks Administration, there is a great risk that the elephants will disappear from the communal lands, and that the pressure on the conservation areas will increase.

8. Alternatives to culling

The supporters of a total elephant protection propose photo-safari tourism as the alternative to culling. The elephant would attract tourists, this would create job opportunities, thus an income for the rural people. Poaching would automatically be reduced, because the poachers could not effectively operate in areas controlled by ecotourism operations. In fact, tourism is, in many cases, a valid option. As soon as the tourism revenues exceed the damage caused by the elephants, destroyed crops can be seen as some kind of winning costs to generate a higher income from tourism.

It is proven that conservation areas on marginal agricultural lands can make economically sense. They require higher investments, but result also in higher returns than subsistence agriculture. On the other hand, it has to be recognised that international tourism focuses on a few spots which are particularly attractive and where good infrastructure is available. This means, that only a small portion of the entire elephant range can profit from the tourism option.

In Zimbabwe photo tourism is, therefore, considered second priority, and controlled hunting is promoted as a lower risk option because it requires less investments. In addition, hunting has the advantage that it can be practised everywhere, thus generating income for the rural population of the entire elephant range.

9. Consequences of the resumption of the ivory trade

The supporters of an ivory trade ban argue that CITES has been unable to control illegal trade, and they pretend that even strictly controlled exports from Southern Africa would stimulate poaching elsewhere on the continent. Although many experts do not agree with these views, there is consensus that re-opening the ivory export from Southern Africa shall not result in a threat to elephant populations in other countries. This means that effective mechanisms are required to monitor the legal trade and to prevent any illegal trade. Once these mechanisms are operational, the sustainable use of elephant populations for the international ivory trade will be compatible with, and even enhance, the goals of species conservation.

The supporters of the re-opening of the ivory trade argue that legal ivory will always become available as a consequence of proper protection and management, and that it makes no sense to renounce on revenues from the sale of such ivory, if this money could be re-invested in elephant conservation.

Effective elephant protection costs more than 200 US Dollars per square kilometer and year. The funds required to protect all elephants in their today's range⁷ would amount to the astronomic sum 1,4 billion US Dollars per year. It is obvious, that this amount could neither be generated by the range states nor by donations from the industrialised world.

10. What brings the future?

Recognising that it will not be possible to preserve all elephant populations, major NGOs elaborated, a few

⁷ 5,9 million km²

years ago, an action plan for the African elephant. The plan aims at eliminating the illegal ivory trade and to generate funds to ensure viable elephant populations. All over Africa, the survival of 42 genetically important populations with a total of 230'000 animals and living on a total area corresponding to the surface of Germany should be guaranteed. The protection of these elephants would require 100 million US Dollars per year. This money should be generated by trophy hunting fees, photo tourism and the proceeds of the sale of ivory, skins and meat. The ivory would account for 50 % of the revenues, the skins and meat for another 20 %. This scheme would ensure a long-term protection independent from donations.

While this pan-African action plan still exists on paper only, another idea, developed in South Africa, begins to materialise: the creation of "Transfrontier Conservation Areas", so-called "Peace Parks". TCAs are so-called biosphere reserves, which will integrate the rural human population. This population should live in harmony with nature and make its living by sustainably using the resources of the reserve. TCAs encompass protection zones such as National Parks, and utilisation zones, such as controlled hunting areas, communal lands or extensively used farms. As a result, the wildlife will have much larger contiguous ranges available than today, and culling operations, if they should become necessary, will no longer take place in the core areas, but in the utilisation zones. As an example, a Kruger- Banhine - Zinave - Gonarezhou TCA is envisaged. It will comprise about 100'000 km², half of which will be National Parks and Game Reserves, while the other half will consists primarily of "communal areas". In this huge wild land it will be possible to amalgamate conservation and utilisation not only of elephants, but of all natural resources, for the benefit of humans and wildlife.

It has been proven that elephants in Africa can be sustainably used like red deer or chamois in Europe. However, the fundamental question whether wildlife should be fully protected or used in a wise manner will continue to be debated, and the elephant will continue to be used as a charismatic flagship species in this debate. Let's hope for the future that the debate will become more rational. Let's hope that people will understand, that protection and utilisation do not necessarily exclude each other, and that the long term interests of the elephant and of the rural people in the elephant range are more important than the short-term interest of European and North American politicians and NGOs.

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