

## CHAPTER 2

# THE CONTEXT OF THE “ELEPHANT DEBATE”

Understanding and predicting the dynamics of ecosystems and wildlife populations is the domain of ecology, botany, zoology – all of which are natural sciences that progress through scientific research and generate information to be analysed, interpreted and communicated by scientists. Why then did SANParks and later DEAT embark on a consultative process to gather stakeholder and societal inputs on the future management of South Africa’s elephants?

Decisions about the goals for which ecosystems are managed, their acceptability and that of the methods used to achieve them, cannot be determined by science or scientists alone. Decisions about environmental problems involve both knowledge and values, and it is not only scientists who have knowledge, and it is not only non-science stakeholders who are guided by their values. A participatory management philosophy recognises that “everybody has a piece of the wisdom” we need and that not only do stakeholders have a right to be involved in decisions which affect them, their involvement can lead to policies and decisions that are wiser, fairer, more efficient and more competent.

Elephant management requires specific attention in participatory conservation planning because:

- ***Elephants are ecosystem engineers:***  
South Africa’s protected areas, our biodiversity and cultural heritage, are national and public assets of global importance. That elephants in confined spaces can markedly change ecosystem conditions is beyond dispute. In ecological circles organisms that have this sort of effect are known as ecosystem engineers and their potentially disproportionate influence on other species and ecological processes focuses the attention of scientists and managers alike.
- ***Elephants are important to people:***  
Elephants are an iconic and charismatic species – entrenched in human history, culture and consciousness for thousands of years. Along with whales, dolphins, chimps, gorillas and other higher primates many view elephants as fellow sentient beings – highly intelligent animals with an awareness of self and others, and complex emotions that influence their social networks. Many people are willing to pay great sums of money for the opportunity to see these animals in the wild, or even for the assurance that wild elephant populations will continue to exist. Elephants are prominent in African culture and folklore, being associated with power and royalty, and many South Africans value elephants as part of their cultural heritage. But many, especially those in rural and poor African communities, also see elephants as an important, or potentially important, resource base for supplementing their incomes, and as a raider of crops that threatens life and livelihoods. Society should therefore contribute to determining the values expressed in the vision and management of specific national parks.
- ***Ethical considerations in elephant management:***  
Decision-makers must take into account stakeholder views, not only about the goals of management, but also the ethics of the methods used and the manner in which they are applied. Stakeholders do not experience the costs and benefits of elephants, or their

management, equally. Though the impacts on local people are paramount, international reaction to chosen management strategies holds the potential for a cascade of national and local socioeconomic effects which should not be ignored.

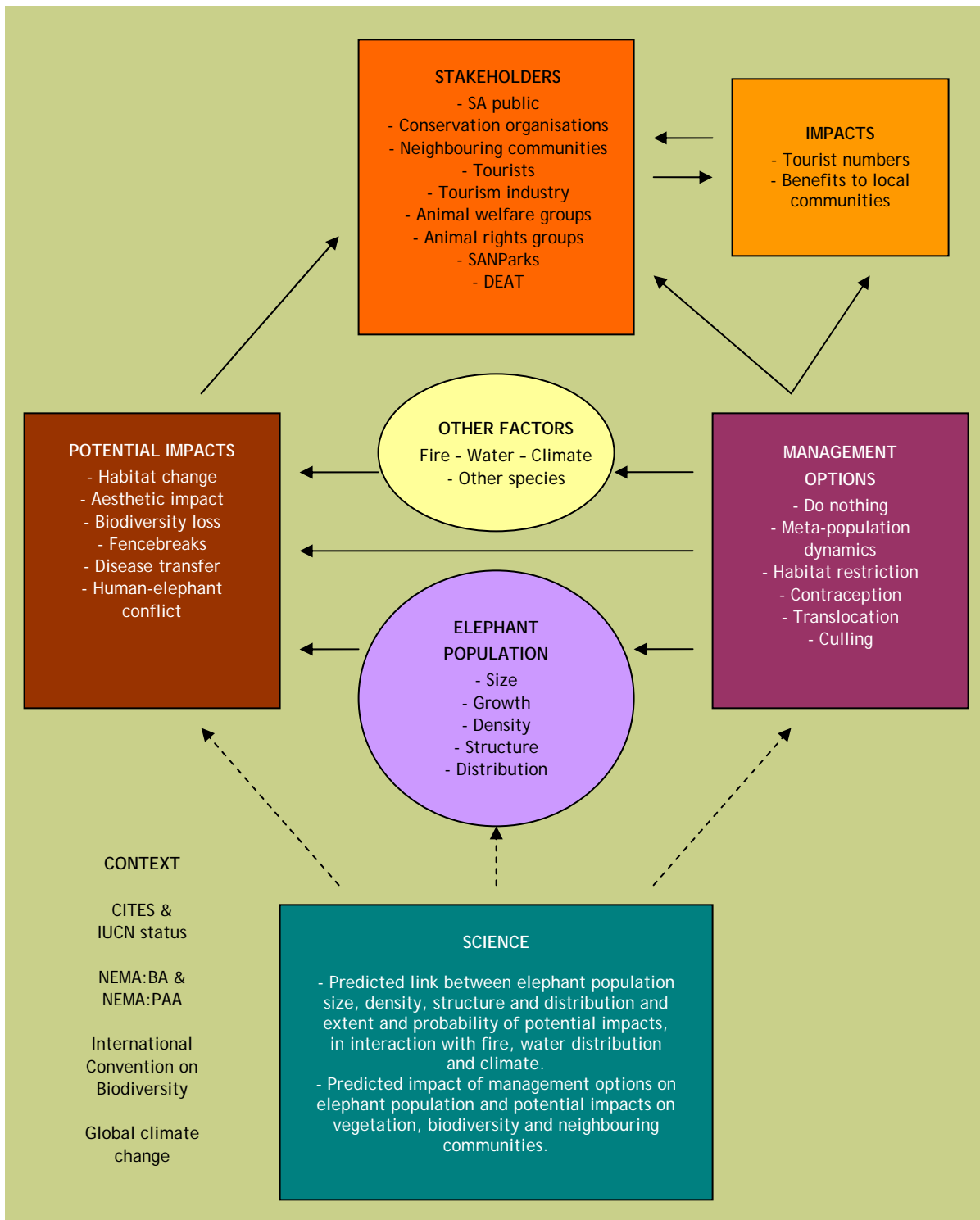
- ***Conflicting objectives of the triple bottom line:***

The public aspect of the 'elephant debate' focuses mainly on management options – more specifically culling. However, the management of natural resources and protected areas, though focused on biodiversity conservation and ecological goals, has several, often conflicting, objectives to consider. These include the triple bottom line of sustainable development – social, economic and environmental – in addition to technical, political, legal, and not least of all ethical considerations. Such decision-making problems are complex and different stakeholder groups may have quite different perspectives on what falls within or without the context of elephant management decision-making. One of the purposes of public participation in policy processes is to generate a shared understanding among the diverse stakeholder groupings of what constitutes fair, informed and competent decision making.

In Figure 1 we present a mind map of the interacting aspects of the elephant management policy, its context, the stakeholders, their issues and concerns, suggested management options, and their potential implications. Fair decision making must be informed by all these factors. In untangling the various issues, conflicts and controversies the competent decision maker distinguishes between 'ends' and 'means' – in other words, the goals and methods of management. Stakeholders' interest in, and disagreement within, the debate concern both ends and means, along with information from a wide range of sources. Evaluation and selection of management options can only take place once the desired ends of management, and the ultimate values these serve, have been identified and agreed upon. Attempting to consider the merits of various management alternatives (the means to the end) before clarifying one's values and goals is a back-to-front and limiting decision-making approach. On the whole such an approach only serves to generate unnecessary misunderstanding and conflict<sup>1</sup>.

The 'ends' in the elephant management debate concern desired and acceptable impacts on the one hand and levels of risk associated with growing elephant populations on the other. Potential impacts of concern include landscape or habitat change, loss of biodiversity, and increased incidents of fence-breaking leading to elephants and other animals leaving the park where they may spread disease or come into conflict with neighbouring communities. Though both national and international obligations dictate that biodiversity is of overriding concern as an 'end' or 'goal' of protected area management, all of these impacts must also be taken into account when assessing the risks of different management options.

In general management options are aimed at changing the size, density, structure or distribution of elephant populations and thereby the severity, extent or duration of any potential negative impacts. All the potential management options have pro's and con's, ethical concerns, financial and capacity constraints. Some management options have impacts only indirectly related to elephants or ecosystems in the form of the reactions they invoke from stakeholders. Others offer the potential for direct benefits to stakeholders through the use of by-products.



**Figure 1: Mapping the issues affecting elephant management and policy**

### **BOX: CITES and South Africa's elephant population**

The fate of elephants has long been tied to their value as a source of ivory – Africa's 'white gold'. Humans have used and valued ivory since the Stone Age, but it was only with the emergence of professional ivory hunters in the late 18<sup>th</sup> century that this trade escalated to levels that swiftly depleted elephant populations across Africa. The drop in demand for ivory after the first world war, and the protection offered by legislation and the proclamation of protected areas, allowed elephant populations across Africa to stage a remarkable recovery<sup>2</sup>. Then in the 1970s ivory prices soared, and in just a decade poachers were able to remove half of Africa's elephant population. Worst hit were the east African herds – in Kenya, Tanzania and Uganda. The dramatic decline in elephant numbers prompted drastic action from the Convention of International Trade in Endangered Species of Fauna and Flora (CITES). In 1989, CITES elected to ban the legal trade in ivory by moving elephants from Appendix II (permitting controlled commerce in wildlife products) to Appendix I (prohibiting all such trade among parties to the Convention). In recognition of the lower threat to southern African elephant populations, elephants in Botswana, Namibia and Zimbabwe were transferred back to CITES Appendix II in 1997 and South Africa's elephant population followed in 2000. These countries may apply to make limited, conditional, once-off sales of government ivory stockpiles to a CITES-approved importing nation. In 2002, CITES agreed to a once-off sale of 30 tons of South African ivory originating from Kruger National Park.

### **Who are the stakeholders?**

Protected areas, wildlife and biodiversity are global assets – thus all humans, including future generations, have some stake in the outcome of the elephant management policy review process. Impacts are felt more closely by certain groupings by virtue of their specific interests or values, and by others because of the proximity of their lives and livelihoods to protected areas and tourism or, most directly of all, to individual elephants posing a risk to life and property. Different groups are subject to different potential impacts, costs and benefits as a result of growing elephant populations and the different management options.

Stakeholders in the debate can be grouped according to their chief interest in either 'ends' or 'means' or both. The chief interest of some groups is in management as an intervention to prevent impacts, whether on the aesthetics of landscapes, biodiversity, disease control or human-elephant conflict. Other stakeholders' main interest is in the methods that might be used to manage elephant populations. These concern the effects of different management interventions on elephant welfare, on tourism, the economy, and the potential for economic benefit from consumptive use.

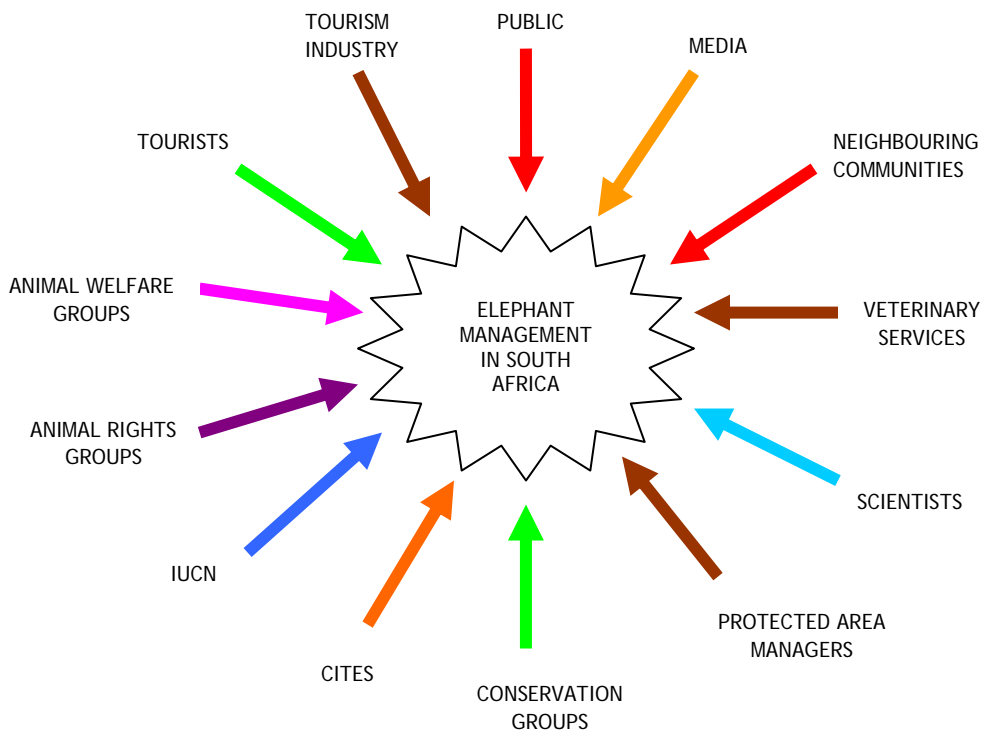
Elephants and their management are therefore of interest to a very wide range of stakeholders in addition to the managers of conservation areas.

The main stakeholder groupings recognised are:

- Conservation organisations, both general and specific, e.g. birding or botanical societies
- Environmental justice groups
- Nature-based tourists

- Nature-based tourism industry
- Communities neighbouring the protected areas with elephant populations
- Animal welfare groups
- Animal rights groups
- Scientists, ecologists
- Government – provincial and national conservation agencies, SANParks, DEAT

There is a distinction between concerns for ‘animal welfare’ and ‘animal rights’. Animal welfare refers to the belief that humans have a moral responsibility to treat animals humanely, i.e. in a way that does not cause them to suffer unnecessarily. A stronger claim is that of ‘animal rights’, which proposes that animals effectively be given legal rights in order to protect their basic interests and prevent them from being exploited by humans.



**Figure 2: Chief role-players and stakeholders in the elephant management debate**

### The range of values influencing elephant management decisions

The range of ways in which elephants and other wildlife are valued by humans potentially gives rise to conflict when the expression of different values gives rise to incompatible actions or scenarios. Incompatible values and ethical frameworks give rise to moral dilemmas, which will persist unless one set of values becomes dominant.

Values attributed to elephants and the ecosystems they inhabit include:

- Aesthetic (appreciation through human senses)
- Bequest (leaving a legacy for future generations)
- Commercial (role in generating income)
- Cultural (importance as cultural symbols)
- Ecological (role in contributing to ecosystem structure, function and composition)
- Empathetic (satisfaction from being able to emotionally relate to other species)
- Existence (sense of wellbeing from the knowledge of a species' or ecosystem's existence)
- Historical (importance as a symbol of a past era)
- Recreational (enjoyment of a wildlife experience)
- Scientific (the advancement of knowledge and understanding)
- Subsistence (for non-commercial consumption)
- Wilderness values (experiencing an absence of human influence or intervention)

## Science and uncertainty

Decisions about the acceptability of impacts and the appropriateness of management options must be informed by both descriptive and predictive knowledge. Scientists are both stakeholders in the debate and providers of knowledge that informs value-based decision-making in consultative processes in policy review. Science and scientists have played a significant part in the events of the last 12 years, and will continue to do so into the future.

In particular, science and scientists are required to clarify:

- The link between elephant population density, structure and distribution and their positive and negative effects on biodiversity.
- Which impacts on biodiversity are unacceptable to any given value system.
- The effectiveness of various management options in reducing or reversing negative impacts, and the likely consequences of these for both elephants and other species.

The issue of elephants and their interactions with their environment is complex and often leads to uncertainty in both our understanding and management decisions. These uncertainties can both fuel and paralyse the debate but they are inevitable and policy makers need to learn how to deal with them. Sometimes this uncertainty represents genuine gaps or contradictions in understanding but very often careful analysis by an interdisciplinary team will find rational explanations that the individual scientists could not. Unfortunately stakeholders, both scientists and others, sometimes use these uncertainties to create a perception of dissent. Amongst scientists this takes on the label of 'adversarial science' because failure to integrate findings from different studies or disciplines mostly serves to polarise scientists, stakeholders and the debate. A further problem is that other stakeholders, such as components of the media or particular lobby groups, use this apparent dissension to bolster their own ends without having to justify them. The challenge is to find consensus among all stakeholders to prevent costly deadlocks in decision making. This has happened many times during the policy review process. However, the consultative process pursued in search of a solution to the elephant management problem was able to establish at least sufficient consensus on issues to allow the forward movement we report in this publication.

## A process to negotiate the elephant management policy problem

What kind of consultation, policy and decision-making process can be used to negotiate the complexity of the elephant management policy 'problem'? An effective consultative policy review approach rests on the following principles<sup>3</sup>:

- All views and perspectives count. Solutions are developed through discussions with all stakeholders.
- Science provides information. Science alone cannot provide the answers.
- Management must be adapted to the context of the problem, considering interrelated problems and externalities.
- Decision-making must be discursive and deliberative. Participants engage in open, honest and respectful discussion aimed at mutual learning and understanding others' perspectives. Avoid unproductive, yet common, tactics such as lobbying authorities about a particular point of view, polling opinions across stakeholder sectors without due recognition of proportional representation, and debating to win the argument rather than listening to understand it.
- Understand the past but build the future.

A DEAT communiqué explained in 2005 that the participatory policy process is not about million-signature petitions which attempt to dictate a decision to authorities, but reaching a sustainable African solution to an African problem through honest and constructive engagement and information-sharing.