Conservation Strategy for the Lion in Eastern and Southern Africa. 1-47. 2006. IUCN/SSC Cat Specialist Group.

Keywords: 1Afr/conservation/conservation strategy/Panthera leo/IUCN/workshop/region/ status/distribution/strategy/threats/threat/viability/prey/management/habitat/livestock/conflict/policy/trade /action plan/lion/population size

Abstract: IUCN partnered with a parallel initiative of the Wildlife Conservation Society to map current lion range and priority areas for lion conservation. The Eastern and Southern African Lion Conservation Workshop was held January 8-13, 2006 in Johannesburg, South Africa (Appendix 2). It followed a similar regional workshop for lions in West and Central Africa held in Douala, Cameroon in October, 2005 (IUCN SSC Cat SG, 2006). The workshop had two parts. In the first technical session, lion specialists working in the region contributed their data on the status and distribution of lion populations. This information fed into the second strategic planning session, which developed the Eastern and Southern African Lion Conservation Strategy. Participants in this session included representatives of Range State governments, national and international NGO's and the safari hunting industry (Appendices 3-4) The participants in each workshop session identified threats to the lion in Eastern and Southern Africa. The technical session identified factors having the greatest influence over viability of important lion populations in the region: availability of wild prey, indiscriminate killing of lions, size and extent of the lion population, and efficacy of management. Other important factors include habitat quality, lion population trend, and presence of domestic livestock. The strategic planning session identified a number of threats resulting from inappropriate management, lion-human conflict, socio-economic factors, inappropriate policies and land-use, political factors and trade. These threats are driven by root causes, with human population growth and poverty chief among them. The goal of the strategy is: To secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits. Six objectives are formulated to address the threats and meet the goal, and a number of specific actions recommended (Chapter 5). This Lion Conservation Strategy is situated at the regional level, in order to produce significant impacts. But it must be followed by the development of national lion action plans (because it is on this level that the strategy actions are implemented (Chapter 6).

# CONSERVATION STRATEGY FOR

# THE LION

## IN EASTERN AND SOUTHERN AFRICA

WILDLIFE CONSERVATION SOCIETY

AFRICA RESOURCES TRUST

SSC Species Survival Commission

CAT ACTION TREASURY

defra

IUCN The World Conservation Union

SCI FOUNDATION

SAFARI CLUB INTERNATIONAL FOUNDATION

CML

SPECIES SURVIVAL COMMISSION CAT SPECIALIST GROUP

# CONSERVATION STRATEGY FOR THE LION
# *Panthera leo* IN EASTERN AND SOUTHERN AFRICA

**December 2006**

African Lion Working Group

**Prepared by the IUCN SSC Cat Specialist Group**

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# CONSERVATION STRATEGY FOR THE LION *Panthera leo* IN EASTERN AND SOUTHERN AFRICA

**Available online at <www.felidae.org>**

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# ABBREVIATIONS

| | |
|---|---|
| ALWG | African Lion Working Group |
| Cat SG | Cat Specialist Group, IUCN SSC |
| CBD | Convention on Biological Diversity |
| CITES | Convention on International Trade in Endangered Species |
| CML | Institute for Environmental Sciences, Leiden University |
| CMS | Convention on Migratory Species |
| COMESA | Common Market of Eastern and Southern Africa |
| COP | Conference of the Parties |
| DEFRA | UK Department for Environment, Food and Rural Affairs |
| EAC | East African Community |
| EARO | Eastern Africa Regional Office, IUCN |
| IUCN | The World Conservation Union |
| LCU | Lion Conservation Unit |
| NBI | Nile Basin Initiative |
| NGO | Non-governmental organization |
| PAC | Problem Animal Control |
| ROSA | Regional Office of Southern Africa, IUCN |
| RWPS | RangeWide Priority Setting |
| SADC | Southern African Development Community |
| SCIF | Safari Club International Foundation |
| SSC | Species Survival Commission, IUCN |
| WCS | Wildlife Conservation Society |

# 1. EXECUTIVE SUMMARY

The lion is a powerful symbol of Africa, yet living with lions poses hardships for many African communities. In some areas, the lion is a major predator of domestic livestock, leading to serious conflicts with local people. Lions also are potentially dangerous and still take human lives with troubling frequency in some areas. Yet the lion is not only a source of personal and economic damage, but also of economic and personal benefits, as a primary attractor for tourism and one of Africa's "Big Five" trophy animals.

Recent surveys have indicated a suspected decline of 30-50% of the African lion population, with current estimates ranging from 23,000 to 39,000. The lion is classified as Vulnerable on the IUCN Red List of Threatened Species for this reason. The lion is most threatened in the regions of West and Central Africa, containing only about 10% of the continental estimated population.

The situation of the lion drew international attention at the October 2004 CITES COP13 (13$^{th}$ Conference of the Parties to CITES). A proposal to transfer the lion to Appendix I and restrict trade in lion trophies sparked extensive debate among African Range States, and highlighted the need to achieve pan-African consensus on the way forward for lion conservation. The proposal was withdrawn, and Range States agreed that a series of regional lion conservation workshops should be held. IUCN-The World Conservation Union was asked to organize workshops which would bring together stakeholders to develop regional lion conservation strategies using a participatory approach based on a logical framework (Appendix 1). IUCN partnered with a parallel initiative of the Wildlife Conservation Society to map current lion range and priority areas for lion conservation.

The Eastern and Southern African Lion Conservation Workshop was held January 8-13, 2006 in Johannesburg, South Africa (Appendix 2). It followed a similar regional workshop for lions in West and Central Africa held in Douala, Cameroon in October, 2005 (IUCN SSC Cat SG, 2006).

The workshop had two parts. In the first technical session, lion specialists working in the region contributed their data on the status and distribution of lion populations. This information fed into the second strategic planning session, which developed the Eastern and Southern African Lion Conservation Strategy. Participants in this session included representatives of Range State governments, national and international NGO's and the safari hunting industry (Appendices 3-4)

The workshop's technical session found that the lion has been extirpated from at least 30% of its historical range in Eastern and Southern Africa. Current known lion range in the region is estimated at 1.7 million km$^2$. This range could be considerably larger: lion distribution over extensive areas its historical range in the region are still poorly known and highlight the need for further survey work.

Sixty-six important lion populations were identified as priorities for conservation, comprising 61% of known and possible lion range in the region (Chapter 3).

The participants in each workshop session identified threats to the lion in Eastern and Southern Africa. The technical session identified factors having the greatest influence over viability of important lion populations in the region: availability of wild prey, indiscriminate killing of lions, size and extent of the lion population, and efficacy of management. Other important factors include habitat quality, lion population trend, and presence of domestic livestock. The strategic planning session identified a number of threats resulting from inappropriate management, lion-human conflict, socio-economic factors, inappropriate policies and land-use, political factors and trade. These threats are driven by root causes, with human population growth and poverty chief among them. International conservation politics have sometimes jeopardized Range State lion conservation policies (Chapter 4).

Recognizing that these problems will require international, national and local resources to solve, this strategy has a global **vision** of **a sustainable environment for the mutual benefit of lion populations and people in perpetuity.**

This vision recognizes that lion conservation must be viewed in a broad perspective, integrating social and ecological aspects of sustainable natural resource management.

The **goal** of the strategy is: **To secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits.**

Six objectives are formulated to address the threats and meet the goal, and a number of specific actions recommended (Chapter 5).

This Lion Conservation Strategy is situated at the regional level, in order to produce significant impacts. But it must be followed by the development of national lion action plans (because it is on this level that the strategy actions are implemented (Chapter 6).

# 2. INTRODUCTION

## *2.1 The Importance of Lion Conservation*

Ecosystem degradation constitutes one of the greatest threats to global biodiversity. The Convention of Biological Diversity (CBD) signed in Rio de Janeiro, Brazil in 1992, underlined the need for taking adequate measures for the protection and the conservation of the ecosystems – those with the greatest species richness being the tropical forests and savannas. The lion occurs in all African habitats except deep desert and deep rainforest; it is therefore an important element in many African ecosystems. Africa being home to the majority of the world's lions, it is obvious that the solutions for the conservation of the lions must be developed here.

The lion *Panthera leo,* of the family of Felidae, is one of the flagship species of Africa for research, tourism and trophy hunting. Lion presence in an area is an indicator of its wild and natural integrity. The species is under increased pressure, especially in West Africa and Central Africa. Focused effort is needed to ensure its long-term survival. A thorough analysis will be made in the following chapters of this document.

The lion is a powerful and omnipresent symbol, and its disappearance would represent a great loss for the traditional culture of Africa (it is used in coats of arms, heroic names of former kings, frescos, names of football teams, tales, proverbs, sayings, etc) -- even if to live with the lion poses serious challenges for many African communities, especially those bordering conservation areas which protect lion populations.

In many parts of Africa, the lion is the principal predator of domestic cattle, which causes conflicts with stockbreeders. Livestock loss and a poor management capacity for human-lion conflict lead to declines in lion populations. There is no obvious full and immediate solution to this problem, but preventative measures and damage management can mitigate the conflicts and reduce depredation to a tolerable level (Frank *et al.*, 2005a). A different type of conflict is man-eating, which is overall very rare but yet a serious problem in certain areas and not tolerable (Packer *et al*., 2005a).

The lion is not only a source of danger and personal and economic damage, but also a source of personal and economic advantages and benefits. It is a principal element of tourist attraction and one of the "Big Five", the five great species of trophy hunting in Africa. Tourism is today one of the most significant industries in the world, and a flourishing tourist industry is necessary for the economies of developing countries. It constitutes one of the principal generators of foreign currency for some developing countries.

As often in conservation, there is a lack of data on status, population trend, and ecology. Wildlife management institutions in the region lack the human capacity and financial resources to safeguard their lions. Based on these facts, it is obvious that only a broad approach can lead to improvements.

The present strategy is situated at the regional level, in order to produce significant impacts. But it must be followed by the development of national action plans for conservation of the species (because it is on this level that actions are implemented).

It is within this framework that **the vision** of the present lion conservation strategy for Eastern and Southern Africa is to **ensure a sustainable environment for the mutual benefit of lion populations and people in perpetuity.**

**The goal** of this strategy is **to secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits.**

To achieve this goal, this strategy sets out **six objectives** in six different domains, which are:

1. Management: To ensure effective conservation management of lions, their habitats and wild prey
2. Mitigation: To minimize and, where possible, eliminate human-lion related conflicts
3. Socio-economics: To equitably distribute the costs and benefits of long-term lion management
4. Policy and land-use: To develop and implement harmonious, comprehensive legal and institutional frameworks that provide for the expansion of wildlife-integrated land-use, lion conservation and associated socio-economic benefits in current and potential lion range
5. Politics: To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices
6. Trade: To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade

The strategy is intended to be implemented in the next ten years. It is subdivided into six chapters with appendices, references and an executive summary.

## *2.2 Background to this strategy*

An information exchange workshop held in 2001 in Limbé, Cameroon identified the possible reduction in lion distribution in West and Central Africa (Bauer *et al.,* 2001). Following this concern, two continental status surveys were carried out in 2002 (Chardonnet, 2002; Bauer and Van Der Merwe, 2004; see Chapter 3). Both surveys were used, together with other information, for a new IUCN Red List assessment.

In April 2004, the IUCN SSC Cat Specialist Group (Cat SG) carried out an evaluation of the African lion for the IUCN Red List of Threatened Species (Cat SG, 2004). The lion was classified as Vulnerable (VU A2abcd)) according to the following justification: "*a species population reduction of >30 - <50% is suspected over the past two decades (three lion generations = 19.5 years). The causes of this reduction are not well understood, are unlikely to have ceased, and may not be reversible."* Many in the cat conservation community, including the Cat SG and its affiliated African Lion Working Group (ALWG), did not consider the primary causes of this suspected decline to be trade-related (Nowell, 2004), and priorities for lion conservation have been identified as resolving human-lion conflicts and stemming loss of habitat and wild prey (Nowell and Jackson, 1996; Chardonnet, 2002; Bauer and Van Der Merwe, 2004). While the lion is classified as Vulnerable on the IUCN Red List on a continental scale and in each of the other regions, it qualifies as Regionally Endangered in West Africa (Bauer and Nowell, 2004).

The situation of the lion drew international attention at the October 2004 COP13 (13th Conference of the Parties to CITES). A proposal to transfer the lion to Appendix I sparked extensive debate among African Range States, and highlighted the need to achieve pan-African consensus on the way forward for lion conservation. The proposal was withdrawn, and Range States agreed that a series of regional workshops should be held to address the conservation needs of the African lion. IUCN-The World Conservation Union was asked to organize workshops which would develop sub-regional conservation strategies using a participatory approach based on a logical framework. IUCN partnered with a parallel initiative of WCS to organize a Rangewide Priority Setting (RWPS) exercise for lions.

The Eastern and Southern African Lion Conservation Workshop was held January 8-13, 2006 in Johannesburg, South Africa (Nowell and Bauer, 2006; IUCN-ROSA, 2006). It followed a similar regional workshop for lions in West and Central Africa held in Douala, Cameroon (IUCN SSC Cat SG, 2006; Won Wa Musiti *et al*., 2005). The workshop had two parts. In the first technical session, biologists working in the region contributed their data on the distribution, status and threats to lion populations (Chapters 3 and 4, Appendix 4). This information fed into the second strategic planning session, which developed the Eastern and Southern African Lion Conservation Strategy (Chapters 4-6), following a logical framework (Appendix 1). Participants in this session included Range State government representatives, national and international NGO representatives, lion specialists, and trophy hunting industry representatives (Appendix 3). The workshops were organized by IUCN (Regional Office of Central Africa), the SSC Cat SG, the Wildlife Conservation Society and Africa Resources Trust, and sponsored by Safari Club International Foundation, the UK Department for Environment, Food and Rural Affairs and the Wildlife Conservation Society (Appendix 2). This regional conservation strategy is the output of the strategic planning session of the workshop; a preliminary analysis of the results of the technical session is presented in Chapter 3, and will be published later by WCS (Hunter *et al.* in prep.).

# 3. DISTRIBUTION AND STATUS

## *3.1 Historical distribution and status*

Historically, the lion occurred in Africa, Europe, the Middle East and Southwest Asia, in all habitats except very dry deserts and very moist forests. The lion disappeared from Europe during the first century AD and from North Africa, the Middle East and Asia between 1800 and 1950, except one population of the sub-species *P. l. persica* in India. Presently, lions are found in savannah habitats across sub-Saharan Africa (Nowell and Jackson, 1996).

In Eastern and Southern Africa, lions occurred historically throughout the region, except for the Congo Basin rainforest zone and some particular areas (Fig. 3.1; based on Nowell and Jackson, 1996). This historical range was confirmed by participants of the technical session of the regional lion workshop, with one small modification: lions appear to penetrate deeper into the Congolian forest than previously assumed.

There is little controversy over historical range, but this cannot be said about population numbers. Lions are difficult to count, and any population estimate is essentially imprecise. There is no estimate for lion numbers before 1950, but three sources can be cited for estimates in the recent past:

- Myers (1975) wrote “Since 1950, their numbers may well have been cut in half, perhaps to as low as 200,000 in all or even less.”
- In the early 1990s, IUCN/SSC Cat Specialist Group members made educated “guesstimates” of 30,000 to 100,000 for the African lion population (Nowell and Jackson, 1996).
- Ferreras and Cousins (1996) developed a GIS-based model to predict African lion range and numbers; because of the age of their data sources on extent of agriculture and pastoralism they selected 1980 as the base year for their predicted African lion population of 75,800.

## *3.2 Current distribution and status*

Three sources are important in describing current distribution and status: Chardonnet (2002), Bauer and Van Der Merwe (2004) (published in 2004 but data gathered and pre-published in 2002) and the outcome of the technical session that was part of the strategy definition workshop (Hunter *et al*., in prep.). A detailed comparative analysis of the first two publications was prepared by their authors as part of the present strategy definition process (Bauer *et al*., 2005).

For current lion range, the best available source is undoubtedly the forthcoming report of the technical session of the regional lion workshop (Hunter at al., in prep.). The report is currently being finalized and may be regularly updated, but some pertinent results are presented here. Table 3.1 presents the different categories of lion range identified. Fig. 3.1 presents the lion distribution map from this report; it includes all lion populations identified by the other two publications.

**Figure 3.1: Historical and Current Lion Distribution in Eastern and Southern Africa.** Source: Hunter *et al*. (in prep.)

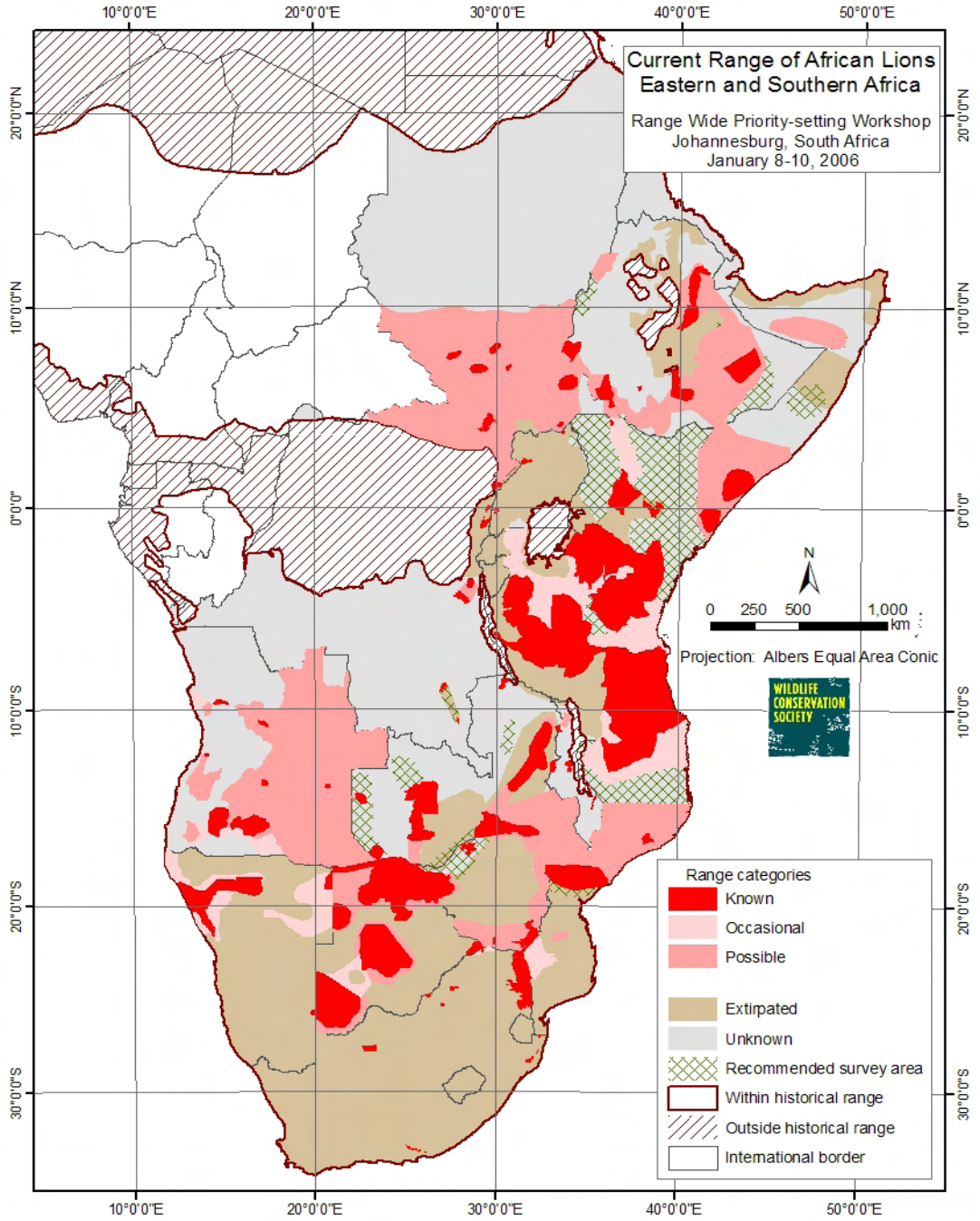



Table 3.2 compares the extent of historical range with current range. Lions have been extirpated from 30% of their historical range in the region, with the largest areas of extirpation in Southern Africa. Lion distribution is known with certainty over only about 1.7 million km$^2$ (Lion Range, Table 3.1). This figure is somewhat smaller than Chardonnet's (2002) estimate of lion range as 2.1 million km$^2$ in Eastern and Southern Africa. If possible range (areas of historical range where conditions are known to be favorable and there are no data to indicate that lions are extirpated) is included, the figure for current lion range is considerably larger: 3.9 million km$^2$. Lion distribution is essentially unknown over very large areas of

its historic range (4.6 million km$^2$ – survey areas and unknown areas). This exercise highlights the important need for survey work and data collection in range areas described as possible, survey and unknown.

**Table 3.1. Lion Range Types**

| CATEGORY | | DEFINITION |
|---|---|---|
| **Area of Knowledge** | **Lion Range** | **Known range:** areas where it is certain that lions are present<br>**Occasional range:** areas where lions are present sporadically or are transient**.** |
| | **Extirpated** | Lions are known not to be present |
| | **Possible Range** | Areas within the historical range where conditions for lion presence are favorable (habitat, prey, human population density) and where there are no data to indicate that the lions do not exist there |
| | **Survey Areas** | Areas which may contain lions and should be surveyed for their presence |
| **Unknown** | **Unknown** | Areas within the historical range of the lion unknown to contributing experts |
| | **Survey Areas** | Areas which may contain lions and should be surveyed for their presence |

**Table 3.2: Historical and Current Lion Range in Eastern and Southern Africa (**Source: Hunter *et al*. (in prep.)

| Range Category | Area |
|---|---|
| Historical range (past 150 years) | 12.08 million km$^2$ |
| Extirpated | 3.57 million km$^2$ |
| Known range | 1.26 million km$^2$ |
| Occasional range | 0.455 million km$^2$ |
| Possible range | 2.20 million km$^2$ |
| Survey areas | 2.46 million km$^2$ |
| Unknown areas | 2.13 million km$^2$ |

There are three categories of factors that limit current lion range, according to participants in the technical session. The first category is a set of factors that can be attributed to human pressure: human density, livestock density, illegal lion killing and insufficient prey. These were each mentioned about equally often. Problem Animal Control (PAC) and fences were indicated to a lesser extent as limiting lion range, about as often as the category of 'limiting factors not known'. Finally, the category of physical barriers such as habitat transition, water, elevation and other physical barriers, was mentioned as limiting only a small part of lion range

For current lion numbers, there is no 'best' source. The RWPS exercise is the most recent. Population estimates (ranging in quality) were provided by

contributing specialists for the most important lion populations (Lion Conservation Units or LCUs, see next section), most frequently in size classes, but sometimes specific figures (Table 3.5). Using the medians for these size classes yields a total estimate of 29,665 lions, in areas covering 61% of known and possible lion range in Eastern and Southern Africa and the Democratic Republic of Congo. Population estimates were also provided for some range areas outside of LCUs, but these estimates for approximately half the area. These estimates are not included here because of the relatively incomplete coverage of the region.

The other two sources adopted similar methods in estimating lion numbers: querying resource persons and literature for available knowledge on lion numbers and distribution. A comparative analysis (Bauer *et al*., 2005) describes in detail that Bauer and Van Der Merwe (2004) obtained a larger proportion of their estimates with more accurate methods, but spatially limited to areas for which information was available, primarily protected areas. Chardonnet (2002) in contrast, has a larger number of information sources and larger geographical coverage and includes some extrapolation or speculation about data deficient areas, which partly explains the difference in figures. A comparison of their results is presented in Table 3.3. This table only presents the estimates, the sources have different methods of calculating minimum and maximum figures and these intervals are therefore not presented here.

**Table 3.3: Lion population estimates in 2002 by region**

| Region | Bauer & Van Der Merwe | Chardonnet | Ratio of divergence |
|---|---|---|---|
| West Africa | 850 | 1 163 | X 1.4 |
| Central Africa | 950 | 2 815 | X 3 |
| Eastern Africa | 11 000 | 15 744 | X 1,4 |
| Southern Africa | 10 000 | 19 651 | X 2 |
| Total | 23 000 | 39 373 | X 1.7 |

Chardonnet (2002) used ecological boundaries to define regions whereas Bauer and Van Der Merwe (2004) used national borders. The only significant impact of this difference is made by Tanzania's Selous ecosystem which, if moved from Chardonnet's Southern to Eastern estimates, equalizes the Southern African estimate and increases the ratio of divergence for Eastern Africa to 1.9. However, Bauer and Van Der Merwe (2004) specifically cautioned that their Eastern Africa figures do not include Tanzania's large but for them insufficiently known Ruaha and Tarangire ecosystems; excluding these brings the Eastern African divergence ratio back down to 1.4.

Central Africa is clearly the region with most divergence, reflecting a lack of knowledge about lions in this region. For example, Figure 3.1 shows that a large part of the Democratic Republic of Congo within the lion's historical range remains unknown. But despite intensive research on a few well known populations (Serengeti, Laikipia, etc.), Eastern Africa is next in data paucity. The greatest quantitative impact of data paucity is undoubtedly on the Tanzanian figures. The greatest impact of data paucity on the extent of lion range is expected in countries north of Tanzania, however.

## *3.3 Distribution and status over countries*

Chardonnet (2002) proposes a list of lion Range States in Eastern and Southern Africa which remains to be validated by national governments: 16 countries as permanent Range States (list in Table 3.4), Burundi as an occasional Range State and Eritrea, Djibouti and Lesotho as non-Range States due to recent extirpation. The Democratic Republic of Congo is considered part of the Central African region and was represented at the Douala but not the Johannesburg strategic planning session. However, DRC was represented at the technical session of the Johannesburg workshop, and so information is included in this chapter on lion range and populations in that country, which is contiguous with neighbors in both Eastern and Southern Africa.

Table 3.4 presents estimated total lion populations per country. Some populations are contiguous across national borders. For the figures of Bauer and Van Der Merwe (2004), note that the estimates do not include some populations known to exist but for which they had no estimate. Note that the figures of Chardonnet (2002) in Table 3.4 were re-calculated to national borders (Bauer *et al*. 2005).

**Table 3.4: National lion population estimates (2002)**

| Lion population estimates | Chardonnet, 2002 | Bauer & Van Der Merwe, 2004 |
|---|---|---|
| **Southern Africa** | | |
| Angola | 749 | 450 |
| Botswana | 3207 | 2918 |
| Malawi | 25 | n/a |
| Mozambique | 955 | 400 |
| Namibia | 691 | 910 |
| South Africa | 3852 | 2716 |
| Swaziland | 27 | 15 |
| Zambia | 3199 | 1500 |
| Zimbabwe | 1686 | 1037 |
| **Eastern Africa** | | |
| Ethiopia | 1477 | 1000 |
| Kenya | 2749 | 2280 |
| Rwanda | 45 | 25 |
| Somalia | 217 | n/a |
| Sudan | 800 | n/a |
| Tanzania | 14432 | 7073 |
| Uganda | 618 | 575 |
| **Dem. Rep. Congo** | | |
| | 240 | 556 |

Censusing lions in a particular area is time consuming, labour-intensive, requires specific training, and is therefore expensive. While such survey data should be generated in the future for specific areas of interest, we currently have to rely on various different methods of estimating lion numbers for most range locations. The current level of knowledge of lion status in Eastern and Southern Africa is unprecedented, however, with two independent inventories in 2002 (Chardonnet, 2002; Bauer and Van Der Merwe, 2004), a consensual review of both by their

authors (Bauer *et al*., 2005), and a consensus on current range in 2005 as a result of the technical session of the regional lion workshop (this strategy and Hunter *et al*., in prep.). Divergence in figures in Tables 3.3 and 3.4 has partly been explained by methodological differences; the authors agreed to disagree on the rest and agreed that both could be shown inaccurate in future.

However, the divergence cannot obscure the convergence in showing similar trends for both regions: considerable reduction in both range and numbers of lions. The extent of decline in numbers cannot be assessed from a comparison of historical and current information because of major methodological differences. The IUCN Red List classification (IUCN SSC Cat SG, 2004) speculatively proposes a suspected continental decline of 30-50% over two decades; this proposition has not been widely contested and is not contradicted by the present data. This strategy therefore acknowledges the need for more accurate data, but also states that this may not be a reason to postpone conservation action and postulates that such actions are justified and can be planned and implemented based on the current state of knowledge.

## *3.4 Lion Conservation Units (Viable populations)*

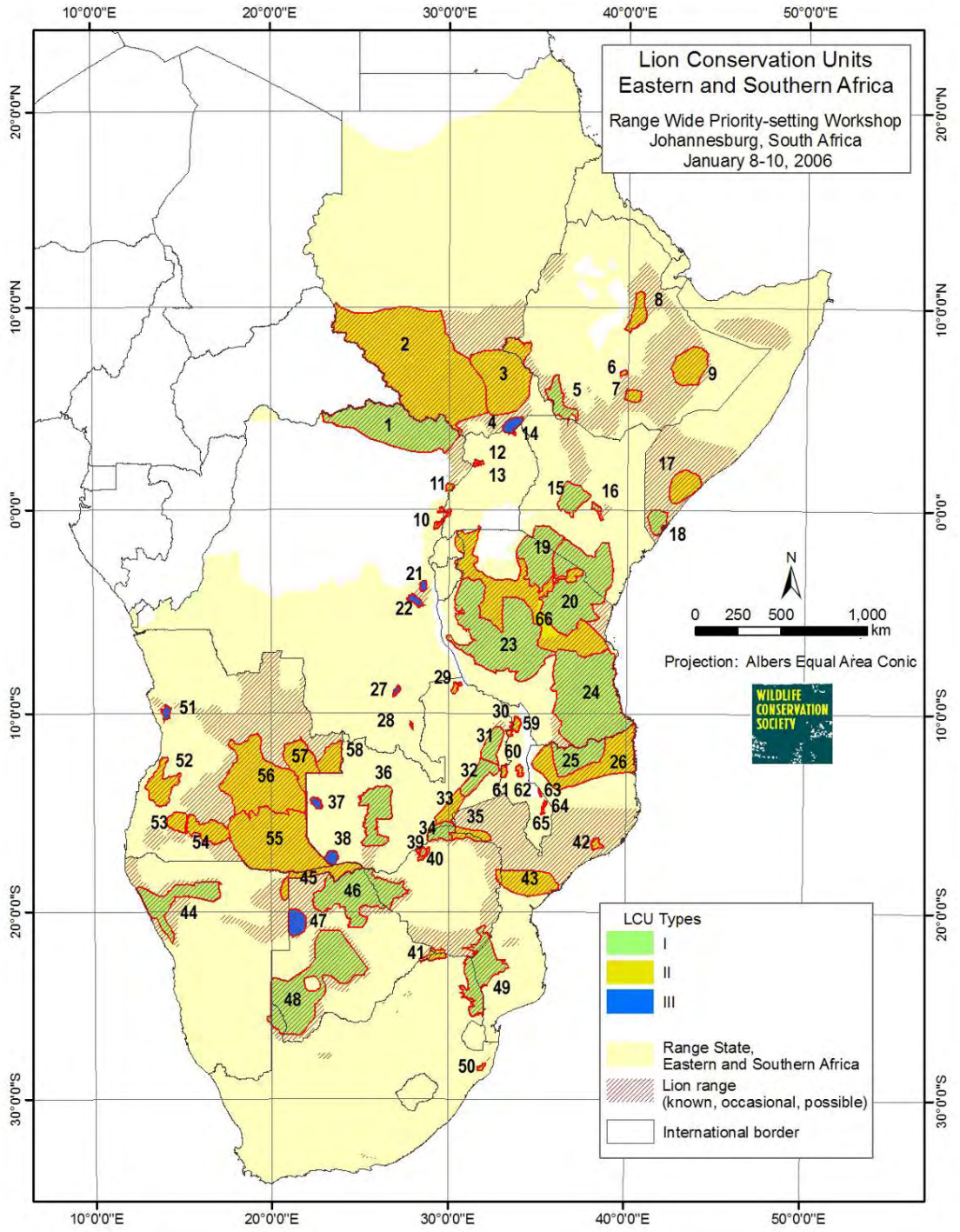
This section describes the outcome of the technical session of the workshop, based on a process that WCS developed and termed RangeWide Priority Setting (Sanderson *et al*, 2002). The process identifies ecological units of importance for species conservation (Conservation Units) and aids in priority setting by assessing threats to these areas from a biological perspective. During the strategic planning session the presentation of Lion Conservation Units was welcomed as guidance for delineation of important and viable lion populations, but having no legal basis the term LCU was not adopted by this strategy and appears in this section for informational purposes only.

Lion experts participating in the technical session identified 66 Lion Conservation Units (Figure 3.2). An LCU is defined as an area of known, occasional and/or possible lion range that can be considered an ecological unit of importance for lion conservation. The 66 LCUs cover 2.37 million km2, comprising 61% of known and possible lion range (as defined in Table 3.1). LCUs are not restricted to or required to contain protected areas and were defined analogous to Jaguar Conservation Units (Sanderson *et al*. 2002). For each LCU, these experts assessed viability, limiting factors and threats; results were helpful for strategy definition because they offer insight into problems and opportunities. Some of the results are presented here, but the complete and final report is currently being prepared by Hunter *et al*. (in prep.).

LCUs were categorized as viable (class I, 19 cases), potentially viable (class II, 35 cases), or significant but of doubtful viability (class III, 12 cases), based on population size, prey base, level of threats and habitat quality. LCUs were characterized as indicated in Table 3.5. Lion populations in these LCUs were considered generally considered stable in trend (21 cases; 32%) or decreasing (24 cases, 36%). A number were unknown in trend (16 cases, 24%), including all eight LCUs in Angola. Only five were considered increasing; with the exception of Gorongosa/Marromeu, they are relatively large populations. Most (65%) of LCUs

have more than half their area under some form of legal protection. Fifteen LCUs (23%) are very large areas greater than 50,000 km$^2$ and can be considered strongholds for lions.

**Figure 3.2: Lion Conservation Units in Eastern and Southern Africa**
Source: Hunter *et al*. (in prep.)




Experts were asked to assess the most important threats to LCUs. Threats were roughly quantified and ranked as shown in Table 3.6. For each LCU, experts were also asked to rank these threats by giving at least a 'top 3' (ranks given in

superscript in Table 3.6; read horizontally). By scoring every threat for the number of times it ranked first (3 points), second (2 points) or third (1 point), we compared threats (Table 3.6, read vertically).

Indiscriminate killing of lions and depletion of their prey are the most prevalent and serious threats in Eastern and Southern Africa, followed by small lion population size. Habitat conversion and livestock encroachment also rank as significant threats. Trophy hunting, as it is currently carried out, was considered to have an adverse impact on lion populations in several LCUs. This Strategy emphasizes that lion trophy hunting is an important management tool that can provide benefits to local people and revenues to government conservation authorities, but stipulates that best practices should be implemented in the industry to ensure sustainability. Problem Animal Control (PAC), carried out either by government officials or though laws which devolve this right to landholders, was also considered to adversely impact lions in some LCUs. While indiscriminate killing of lions by local people, driven primarily by lion-human conflict, is considered the leading threat to most LCUs, it is important that these other forms of offtake and control are managed for sustainability and to enhance lion conservation.

**Table 3.5: Characteristics of Lion Conservation Units in Eastern and Southern Africa**

| Lion Conservation Unit name & Figure 3.2 number | Area (1000s of $km^2$) | LCU Type | Percentage Gazetted* | Estimated lion population size | Pop. trend |
|---|---|---|---|---|---|
| Albertine North (11) | 2.0 | II | >50 | <50 | ↓ |
| Albertine South (10) | 3.2 | II | >50 | 100-250 | ↓ |
| Alto Zambeze (58) | 18.21 | II | 0 | 50-100 | ? |
| Arboweerow-Alafuuto (17) | 24.75 | II | 0 | 100-250 | ↓ |
| Awash (8) | 15.16 | II | 25-50 | <50 | ↓ |
| Bale (6) | 1.09 | II | <50 | <50 | → |
| Bicuar (53) | 9.91 | II | 75% | 20-40 | ? |
| Bocoio-Camucuio (52) | 24.8 | II | 1% | 40-70 | ? |
| Boma-Gambella (3) | 107.1 | II | n/a | 250-500 | ? |
| Bush-Bush (18) | 12.4 | I | n/a | 500-1000 | ? |
| Cameia Lucusse (58) | 30.55 | II | 40% | 70-130 | ? |
| Cuando Cubango (55) | 144.44 | II | <25 | 750-1400 | ? |
| Dar-Biharamulo (66) | 164.98 | II | <25 | 900 | ↓ |
| Etosha-Kunene (44) | 55.7 | I | >50 | 315-595 | ↑ |
| Garamba-Bili Uere Complex (1) | 131.64 | I | >50 | 100-250 | → |
| Gile (42) | 2.85 | II | >50 | <50 | ? |
| Gorongosa/Marromeu (43) | 42.09 | II | >50 | 100-250 | ↑ |
| Greater Limpopo (49) | 60.99 | I | >50 | >2000 | ↑ |
| Greater Niassa (26) | 86.47 | II | <25 | 100-250 | ↓ |
| Hluhluwe-Umfolozi (50) | 0.91 | II | >50 | 80 | → |
| Itombwe Massif savanna (21) | 2.17 | III | <25 | <50 | ↓ |
| Kafue (36) | 3.18 | I | >50 | 250-500 | → |
| Kasungu (62) | 1.98 | II | 100 | <10 | ↓ |

| Lion Conservation Unit name & Figure 3.2 number | Area (1000s of km$^2$) | LCU Type | Percentage Gazetted* | Estimated lion population size | Pop. trend |
|---|---|---|---|---|---|
| Kgalagadi (48) | 146.96 | I | >50 | 500-1000 | → |
| Khaudum-Caprivi (45) | 24.7 | II | 25-50 | 100-200 | → |
| Kidepo Valley-Sudan (4) | 7.16 | III | >50 | <50 | ↓ |
| Kidepo Valley-Uganda (14) | 0.36 | II | 100 | <35 | ↓ |
| Kissama-Mumbondo (51) | 2.78 | III | <25 | <10 | ? |
| Kundelungu (28) | 0.41 | III | >50 | <50 | ↓ |
| Laikipia-Samburu (15) | 21.89 | I | <25 | 350 | → |
| Liuwa Plains (37) | 17.04 | III | >50 | <50 | ? |
| Liwonde (65) | 0.40 | II | 100 | <10 | ↓ |
| Luama Hunting Reserve (22) | 3.34 | III | 25-50 | <50 | ↓ |
| Luchazes (56) | 125.62 | II | 2% | 400-700 | ? |
| Maasai Steppe (20) | 144.69 | I | 25-50 | >1000 | ↓ |
| Mangochi (64) | 0.43 | III | 100 | <10 | ↓ |
| Matusadona (39) | 1.43 | I | >50 | 50-100 | → |
| Meru (16) | 2.46 | I | >50 | 100-250 | → |
| Mid-Zambezi (34) | 20.03 | I | >50 | 250-500 | → |
| MZ South of Labannakass (35) | 12.4 | II | 25-50 | 50-100 | → |
| Mupa Cubati (54) | 22.61 | II | >50 | 50-100 | ? |
| Murchison Falls North (12) | 0.57 | II | 100 | 100 | → |
| Murchison Falls South (13) | 0.89 | II | 100 | <30 | ↓ |
| Namizimu (63) | 0.28 | III | 100 | <10 | ↓ |
| Niassa Reserve (25) | 41.59 | I | 100 | 800-900 | ↑ |
| Nkotakota (62) | 1.66 | II | 100 | <10 | ↓ |
| North Luangwa (31) | 15.02 | I | >50 | 100-250 | → |
| Nyika – MW (59) | 2.77 | II | 100 | <10 | ↓ |
| Nyika - ZM (30) | 13.42 | III | >50 | 20-30 | ? |
| Ogaden (9) | 35.37 | II | <25 | 50-100 | ↓ |
| Okavango-Hwange (46) | 95.17 | I | >50 | 2300 | → |
| Omay (40) | 2.04 | II | <25 | <50 | ↓ |
| Petauke Corridor (33) | 4.56 | III | >50 | <50 | → |
| Ruaha-Rungwa (23) | 185.54 | I | >50 | 4500 | → |
| Selous (24) | 190.38 | I | >50 | 5500 | → |
| Serengeti Mara (19) | 57.8 | I | >50 | 3500 | ↑ |
| Shashe-Limpopo (41) | 6.46 | II | <25 | 50-100 | → |
| Sioma Ngwezi (38) | 0.22 | III | >50 | <50 | ? |
| South Luangwa (32) | 1.92 | I | >50 | 250-500 | → |
| South Omo (5) | 19.31 | I | <25 | 100-250 | ↓ |
| Southwestern Sudan (2) | 358.15 | II | >50 | 250-500 | ? |
| Sumbu (29) | 43.77 | II | >50 | <50 | ? |
| Upemba (27) | 1.43 | III | >50 | <50 | ↓ |
| Vwaza (60) | 0.84 | II | 100 | <10 | ↓ |
| Welmel-Genale (7) | 6.8 | II | <25 | 50-100 | → |
| Xaixai (47) | 13.07 | III | >50 | 50-100 | → |

*Refers to a form of legal protection, e.g. NP, hunting concession or community conservation area

**Table 3.6: Assessment and ranking of threats for LCUs in Eastern and Southern Africa**

| Lion Conservation Unit name & Figure 3.2 number | LCU Type | Popula-tion size | Disease | Indiscrim-inate killing of lions | PAC | Lion trophy hunting | Prey availability** | Livestock encroach-ment | Habitat conversion | Resource extraction |
|---|---|---|---|---|---|---|---|---|---|---|
| Albertine North (11) | II | Small | None | None[2] | None | None | Medium[3] | None | Some[1] | None |
| Albertine South (10) | II | Medium[2] | Some[3] | Lots[1] | None | None | Some[1] | Some[4] | Some[2] | Some[4] |
| Alto Zambeze (58) | II | Medium[3] | | Some[1] | None | None | Some[2] | | Some | Some[4] |
| Arboweerow-Alafuuto (17) | II | Medium | | Lots[1] | None | None | High | Lots[1] | Lots[1] | Lots |
| Awash (8) | II | Small[3] | None | Some[2] | None | Some[6] | Medium[1] | Lots[5] | Lots[4] | Some |
| Bale (6) | II | Small[1] | None | Some[3] | None | None | Medium[2] | None | Some[4] | Lots |
| Bicuar (53) | II | Small[2] | | Some[1] | None | None | Some[3] | Some[4] | Some[5] | Some |
| Bocoio-Camucuio (52) | II | Small[3] | | Some[1] | None | None | Some[2] | Some[4] | Some[5] | Some[6] |
| Boma-Gambella (3) | II | Medium[4] | None | Some[3] | None | None | Some[1] | Some[2] | Some[5] | |
| Bush-Bush (18) | I | Large | Some[2] | Some[1] | | None | High | Some[1] | Some | Some[2] |
| Cameia Lucusse (57) | II | Medium[3] | | Some[1] | None | None | Some[2] | | Some | |
| Cuando Cubango (55) | II | Large | | Some[1] | None | None | Some[2] | | Some | |
| Dar-Biharamulo (66) | II | Large | Some[5] | Lots[1] | Some | None | Low[2] | Lots | Lots[4] | Lots[3] |
| Etosha-Kunene (44) | I | Large | Some | Some[1] | Some[1] | Some | High[3] | Some[2] | Some | None |
| Garamba-Bili Uere Complex (1) | I | Medium | None | None[2] | None | None | High[3] | None | Some[1] | None |
| Gile (42) | II | Small[3] | Some | Some[2] | None | None | Medium[1] | None | None | Some |
| Gorongosa/Marromeu (43) | II | Medium | None | Some[1] | Some | Some | Low[2] | Some | Some | Some |
| Greater Limpopo (49) | I | Large | Some[3] | Some[1] | Some | Some | High | Some[2] | Some[4] | None |
| Greater Niassa (26) | II | Medium | None | Some[1] | None | Some[3] | Medium[2] | None | Some | None |
| Hluhluwe-Umfolozi (50) | II | Medium[x] | Some | None | Some | None | High | None | None | Some |
| Itombwe Massif savanna (21) | III | Small[1] | None | None | None | Some[2] | Medium | None | Lots | None |
| Kafue (36) | I | Medium | None | Some[2] | None | Lots[4] | High[3] | None | Some[1] | None |
| Kasungu (61) | II | Small[3] | | Lots[5] | | None | Medium[4] | None | Lots[1] | Lots[2] |

| Lion Conservation Unit name & Figure 3.2 number | LCU Type | Popula-tion size | Disease | Indiscrim-inate killing of lions | PAC | Lion trophy hunting | Prey availability** | Livestock encroach-ment | Habitat conversion | Resource extraction |
|---|---|---|---|---|---|---|---|---|---|---|
| Kgalagadi (48) | I | Large | None | Some[1] | Some[3] | Some | Medium | Some[2] | None | Some |
| Khaudum-Caprivi (45) | II | Medium | None | Some[3] | Some[3] | None | Medium[1] | Some[2] | Some | Some[4] |
| Kidepo Valley-Sudan (4) | III | Small[3] | | Some[2] | None | None | Medium[1] | Some | Some | Some[4] |
| Kidepo Valley-Uganda (14) | II | Small[1] | Lots[3] | None | None | None | Medium[2] | Some[6] | Some[4] | Lots[5] |
| Kissama-Mumbondo (51) | III | Small[1] | | Some[2] | None | None | Some[3] | | Some[4] | Some |
| Kundelungu (28) | III | Small | None | None[2] | None | None | Medium[3] | None | Some[1] | None |
| Laikipia-Samburu (15) | I | Medium | None | Lots[1] | Lots[3] | None | Medium[4] | Lots[2] | Some | None |
| Liuwa Plains (37) | III | Small[1] | | Lots[2] | Some[2] | Some[2] | Medium[3] | Some | Some | None |
| Liwonde (65) | II | Small[3] | | Lots[5] | | None | Medium[4] | None | Lots[1] | Lots[2] |
| Luama Hunting Reserve (22) | III | Small[1] | None | None | None | Some[2] | Medium | None | Some[1] | None |
| Luchazes (56) | II | Large | | Some[1] | None | None | | | Some | Some |
| Maasai Steppe (20) | I | Large | None | Some[1] | Some | Some[5] | Medium[2] | Lots[3] | Some[4] | Some |
| Mangochi (64) | III | Small[3] | | Lots[5] | | None | Medium[4] | None | Lots[1] | Lots[2] |
| Matusadona (39) | I | Medium[1] | None | None | None[2] | Some[2] | Low | None | None | None |
| Meru (16) | I | Medium[4] | None | Some[1] | Some | None | Medium[3] | Some[2] | Some | None |
| Mid-Zambezi (34) | I | Medium | None | None | Some | Lots[2] | High | None | None | None |
| MZ South of Labannakass (35) | II | Medium[1] | None | Some[5] | Some[5] | Some[1] | Medium | Some[3] | Some[3] | None |
| Mupa Cubati (54) | II | Medium | | Some[1] | None | None | Some[2] | Some[3] | Some[4] | Some[5] |
| Murchison Falls North (12) | II | Medium[6] | Some[5] | Some[3] | Some[4] | None | High[3] | None | Some[2] | Some[4] |
| Murchison Falls South (13) | II | Small[1] | Some[3] | Some | Some | None | Medium[2] | None | Lots[2] | Some[4] |
| Namizimu (63) | III | Small[3] | | Lots[5] | | | Medium[4] | None | Lots[1] | Lots[2] |
| Niassa Reserve (25) | I | Large | None | Some[1] | None | Some[3] | Medium[2] | None | Some | None |
| Nkotakota (62) | II | Small[3] | | Lots[5] | None | None | Medium[4] | None | Lots[1] | Lots[2] |
| North Luangwa (31) | I | Medium | None | None | None | Lots[1] | High[2] | None | Some[3] | None |
| Nyika – MW (59) | II | Small[3] | | Lots[5] | | None | Medium[4] | None | Lots[1] | Lots[2] |

| Lion Conservation Unit name & Figure 3.2 number | LCU Type | Popula-tion size | Disease | Indiscrim-inate killing of lions | PAC | Lion trophy hunting | Prey availability** | Livestock encroach-ment | Habitat conversion | Resource extraction |
|---|---|---|---|---|---|---|---|---|---|---|
| Nyika – ZM (30) | III | Small[1] | | | | | | | Some[2] | |
| Ogaden (9) | II | Medium[5] | None | Some[2] | None | None | Medium[1] | Lots[3] | Some[4] | |
| Okavango-Hwange (46) | I | Large | None | Some[1] | Some[3] | Some | High | None[2] | None | Some |
| Omay (40) | II | Small[3] | None | Some[2] | Lots[1] | Lots[1] | Medium[2] | Some[2] | Some[2] | |
| Petauke Corridor (33) | III | Small | None | None | None | Some[2] | Medium[1] | None | Some | None |
| Ruaha-Rungwa (23) | I | Large | Some[4] | Some[1] | Some | Lots[3] | High[2] | Some[5] | Some | None |
| Selous (24) | I | Large | Some[3] | None[2] | Some | Some[4] | High[1] | None | None | None |
| Serengeti Mara (19) | I | Large[6***] | Some[2] | Some[4] | None | Some[7] | High[1] | Some[5] | None[3] | None |
| Shashe-Limpopo (41) | II | Medium[1] | | Some[2] | Some[4] | Some[4] | Medium | Some[3] | Some | None |
| Sioma Ngwezi (38) | III | Small[2] | | | | | Some[3] | | Lots[1] | |
| South Luangwa (32) | I | Medium | None | Some | Some | Lots[1] | High[3] | None | Some[2] | None |
| South Omo (5) | I | Medium | None | Some[1] | None | Some[4] | Medium[2] | Some | Some[3] | None |
| Southwestern Sudan (2) | II | Medium[4] | None | Some[2] | None | None | High[1] | Some[5] | Lots[3] | Lots |
| Sumbu (29) | II | Small[2] | | | | | | | | Lots[1] |
| Upemba (27) | III | Small | None | None[2] | None | None | Medium[3] | None | Some[1] | None |
| Vwaza (60) | II | Small[3] | | Lots[5] | | None | Medium[4] | None | Lots[1] | Lots[2] |
| Welmel-Genale (7) | II | Medium | None | Some[2] | None | None | Medium[1] | Some[3] | Some | None |
| Xaixai (47) | III | Medium[3] | Some | Some[1] | Some[2] | Some | Medium | Some | None | Some |
| Threat ranking points* | | 58 | 9 | 108 | 16 | 25 | 85 | 30 | 32 | 20 |

[x] Numbers in superscript indicate the rank of this threat compared to the others, x indicates ex-equo ranking.

* See text for explanation

**Threat ranking is for human hunting of lion prey

***This threat ranking refers to lion population only in Ngorongoro Crater, a small part of the LCU

# 4. THREATS

The main problem analysed during the Eastern and Southern African Lion Conservation Workshop was the reduction in lion range and numbers. Each session of the workshop analyzed these problems separately and using different methods and perspectives.

For the workshop's technical session, participants were asked to identify current threats to individual lion populations (Chapter 3). The top threats identified were indiscriminate killing of lions, hunting of lion prey for subsistence or bush meat trade, small population size, and livestock encroachment. Improperly managed trophy hunting was also considered to be adversely affecting several lion populations. The technical session then ranked a set of factors according to expected impact on the viability of all lion populations in the region. Trophy hunting was excluded from this analysis due to the difficulty of separating potentially negative biological impacts on lion populations from improperly managed offtakes from potentially positive socio-economic impacts on lion conservation. Properly managed trophy hunting was viewed as an important solution to long-term lion conservation. The top factors include, in order of importance: prey availability, indiscriminate killing of lions, size and extent of the lion population, amount of wild habitat available, and efficacy of management for lion conservation. Other important factors include lion population size, habitat quality, lion population status, and the presence of domestic livestock. The technical session also described factors which limit the edges of lion range. The top factors here include human density, livestock density, indiscriminate lion killing and insufficient prey.

The workshop's strategic planning session analyzed threats to lions at the regional level, and began by identifying root causes. Root causes are the primary concern of Range State governments. Unless the root causes of replacement of wild prey by livestock, for example, are addressed, the problem is unlikely to be resolved.

Most problems in lion conservation stem from the linked issues of human population growth and poverty. An expanding poor human population leads to increasing expansion of human settlement into lion habitat, especially of the livestock and agriculture necessary to sustain people in both rural and urban areas. For lions, this results in habitat loss, population fragmentation, and reduction in the wild prey base. As human-lion contact increases, so does human-lion conflict, resulting in reductions in lion numbers (through poisoning, trapping and shooting) and lack of support for lion conservation among local communities.

Another root cause of problems in lion conservation is armed conflict. Beyond its greater costs to people and their society and economy, in relation to lions and wildlife, war prevents tourism and enables wildlife poaching and illegal trade, exacerbated by the spread of firearms and anarchy.

Some root causes in lion conservation are external to Africa. African wildlife-based economies rely on Western tourists (both photo and hunting safari) to generate valuable foreign currency. This is vulnerable to external developments such as terrorism resulting in a general decline in international tourism. In addition, Western governments and conservation groups provide significant funding for conservation in Africa, and African governments find it difficult to chart their own course on behalf of their citizens when they can be subject to donor demands, and the politics of conservation in Western countries.

These root causes result in a number of problems for lion conservation, which can be grouped as follows:

## *4.1. Management*

Improved lion population management would help to resolve many problems in lion conservation. For example, management decision-making needs to be grounded in understanding of lion distribution, status and population trend, yet in many areas there has been insufficient research into these variables, as well as other aspects of lion ecology. There is a widespread lack of government resources and professional capacity to undertake lion population monitoring and management. Management capacity would be enhanced by the development of national action plans for lions to ensure coherent use of limited resources to achieve significant national objectives. Trophy hunting is an important revenue generator and management tool for governments, but concerns have been raised in some areas about potentially unsustainable offtakes. Packer *et al* (2005b) recommend a number of best practices for management for sustainability, including restricting the harvest to older males in order to have minimal impacts on lion reproduction. Traditional cultural practices of lion hunting by Africans are also a threat to lions in some areas and need to be managed for sustainability.

## *4.2. Mitigation*

Lion-human conflict is a fundamental problem in lion conservation (Frank *et al*., 2005b). Lions prey on livestock, especially when the wild prey base is diminished, and in retaliation are killed by people. In some parts of Africa, the loss of human life to lions still occurs with frightening regularity. High levels of lion-human conflict reduce lion population viability, and lead to antagonism among local people toward conservation. The best measures are preventative, and build on traditional African coping strategies for keeping large herds of livestock alongside predators, such as the use of guard dogs, groups of shepherds, and sturdy enclosures for livestock at night (Frank *et al*, 2005b). Even if there is predator damage compensation and insurance, these are most effective if linked to the adoption of preventative measures by livestock owners and claimholders. Because there will always be some level of conflict at the lion-human interface, governments need to establish and equip effective Problem Animal Control units to deal with situations that develop when preventive measures fail. In addition, tolerance can be encouraged in some cases (see next section).

## *4.3. Socio-economics*

Throughout much of Africa, the lion is perceived by local communities as having negative economic value, either through loss of life and livestock, or through loss of income-generating opportunities restricted by protection of the habitat and wild prey lions need to survive. Because area-specific lion conservation measures have often been developed without consultation and active participation of local communities, their needs and capacities have not been taken into account, and there is a resulting lack of support for lion conservation and often a management failure. Benefits of lion conservation, particularly economic benefits, need to be shared equitably with local communities, both by government management authorities and the private sector. Integrating conservation and development is generally recognized as an approach which is more likely to yield sustainable results for both.

## *4.4. Policy and Land-Use*

Wildlife-integrated land-use competes with human-dominated land-use (agriculture, pastoralism, settlement), and often fails due to lack of supportive policy frameworks. National legal frameworks and incentive structures need to be developed to promote wildlife-integrated land-use as a form of rural development, and these legal frameworks should be harmonized regionally to achieve maximum impact for wildlife conservation. Wildlife-integrated land use, policies and planning are non-existent in many places. Where they do exist, they were often defined without transparency and participation, and/or are not being implemented effectively, leading to disincentives for lion and prey integrated land-use as the primary form of development in the lion's main habitat areas.

## *4.5. Politics*

Multi-lateral Environmental Agreements and International Conventions (CBD, CITES, CMS, etc.) are often poorly integrated into regional and/or national policies, and sometimes contravene the sustainable use of lions. Politicians are also poorly informed on issues related to conservation in general and lions in particular, which are low on the political agenda. International politics define the conditions for sustainable use of lions and as such influence income generating capacity of lion Range States. This capacity is jeopardized by groups that oppose sustainable use for reasons related to differing conservation perspectives.

## *4.6. Trade*

Most legal trade in lion products consists of lion trophies, and to ensure it takes place at sustainable levels it needs to be backed up by best practices in trophy hunting management and monitoring. There is also illegal trade in lion cubs, skins, body parts and derivatives for traditional medicine and as curios or souvenirs, although there is little data to indicate how serious a threat this poses. Illegal trade is largely due to ineffective law enforcement, which is in turn due to weak capacity and motivation within law enforcement agencies and a lack of knowledge on this trade. Legal trade needs to be better regulated for sustainability through national laws, CITES implementation, and regional agreements.

The Eastern and Southern African Regional Lion Conservation Strategy is articulated in the next chapter to address these six groups of threats.

# 5. REGIONAL LION CONSERVATION STRATEGY

The Eastern and Southern African Lion Conservation Strategy was defined during a multi-stakeholder strategic planning workshop (participants list, Appendix 3) with high-level lion Range State government representation. Workshop participants chose to develop a joint Eastern and Southern African strategy, rather than two separate regional strategies.

The long-term **vision** of the strategy is: **a sustainable environment for the mutual benefit of lion populations and people in perpetuity.**

This vision recognizes that lion conservation must be viewed in a broad perspective, integrating social and ecological aspects of sustainable natural resource management.

The **goal** of the strategy is: **To secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits.**

This goal has three elements:

1. Conserve existing lion populations;
2. Restore lion populations where possible, and
3. Provide social, cultural, ecological and economic benefits

Targets were defined for all three elements of the goal; these targets represent the threefold ambition for the next 10 years:

1. All viable lion populations remain stable and 50% of those potentially viable become viable, and 50% of those of doubtful viability become viable or potentially viable, with an increase in lion range of at least 1%, within 10 years
2. Human and livestock loss are reduced by at least 50% in at least half of the lion populations within 10 years
3. Wildlife conservation-related net benefits to local communities are optimized where currently realized within 10 years and net benefits are achieved in 50% of areas currently without them within 5 years

These goal-targets must be met to reach the goal.

Based on the participants' problem analysis of the major threats to lions, six specific objectives of the Lion Conservation Strategy were defined. Each objective has associated targets which must be met to achieve the objective, and a related set of activities to be carried out to accomplish this. The strategy was developed through a "Logical Framework" process which is described in Appendix 1.

**OBJECTIVE 1 (MANAGEMENT): To ensure effective conservation management of lions, their habitats and wild prey**

Lions need adequate habitat with sufficient prey for their survival, and effective conservation management is necessary in view of the threats described in chapter 4. The targets and activities for management are:

***Target 1.1: Monitoring and survey programs for effective and adaptive lion conservation established throughout lion range within 3 years***
Activity 1.1.1. Develop and set up monitoring programs
Activity 1.1.2. Identify and procure appropriate equipment
Activity 1.1.3. Identify key areas for data collection, ecological data, trade data, socio-economic data, etc.
Activity 1.1.4. Train personnel in data capture, management and analysis
Activity 1.1.5. Carry out national lion surveys
Activity 1.1.6. Develop and maintain harmonized databases at national and regional levels
Activity 1.1.7. Disseminate information as appropriate

***Target 1.2: Targeted research on ecology, management and mitigation of conflict initiated in representative priority areas in each Range State within 2 years***
Activity 1.2.1. Identify and prioritize biological and socio-ecological research needs
Activity 1.2.2. Standardize methodology where collaborative research is needed
Activity 1.2.3. Develop and carry out research projects in identified areas and aspects

***Target 1.3: Capacity building programs for lion conservation, where possible in tandem with research and monitoring, established in 90% of the extant lion range within 5 years***
Activity 1.3.1. Identify national and regional training needs
Activity 1.3.2. Identify and procure appropriate equipment and funding
Activity 1.3.3. Identify regional centers of excellence for regional training
Activity 1.3.4. Develop and implement capacity building programs for lion conservation

***Target 1.4: Considering local ecological conditions, best management standards and practices identified and implemented in all trophy hunted lion populations within 3 years***
Activity 1.4.1. Identify best practice trophy hunting practices that are acceptable in various areas
Activity 1.4.2. Implement best trophy hunting practices

***Target 1.5: National lion action plans developed in 90% of the extant lion range within 5 years***
Activity 1.5.1. Develop national lion action plans in accordance with this Conservation Strategy

Activity 1.5.2. Advocate for adoption by relevant authorities and implementation of national lion action plans

**OBJECTIVE 2 (MITIGATION): To minimize and, where possible, eliminate human-lion related conflicts.**

Loss of livestock, and in some cases human life, is a main driver of lion killing. A specific objective was formulated around human-lion conflict. Five targets are defined for conflict mitigation:

***Target 2.1: Database on human-lion conflict and problem animal control established in each Range State within 3 years***
Activity 2.1.1. Develop human-lion conflict databases in all lion Range States
Activity 2.1.2. Participatory planning on how to mitigate lion attacks on humans in at least 3 known hotspots

***Target 2.2: Incidents of human-lion conflict reduced by at least 30% within 5 years while also reducing retaliatory killing***
Activity 2.2.1. Develop and implement country specific awareness and education package on lion conservation and management
Activity 2.2.2. Develop mechanisms with the livestock sector to reduce livestock predation by lions

***Target 2.3: Number of lions killed through indiscriminate killings reduced by at least 30% within 5 years after establishment of a baseline***
Activity 2.3.1. Develop and implement country specific awareness and education package on lion conservation and management
Activity 2.3.2. Develop incentives for communities to use legal PAC in three identified hotspots

***Target 2.4: Well-staffed unit established in each Range State to conduct rapid response, restrained and precisely targeted PAC within 5 years***
Activity 2.4.1. Assess needs and management capacity for effective PAC Units in lion Range States within 2 years
Activity 2.4.2. Build capacity for effective PAC Units in each lion Range State in accordance with the needs assessment

***Target 2.5: Incidences of lion attacks on humans reduced by at least 30% from the current levels within 5 years***
Activity 2.5.1. Develop and implement collaborative and effective PAC techniques

**OBJECTIVE 3 (SOCIO-ECONOMICS): To equitably distribute the costs and benefits of long-term lion management.**

The previous objective dealt with loss, this objective deals with the opportunity for people to benefit from lion conservation. By addressing socio-economic issues,

local people can be motivated to contribute to lion conservation. Socio-economic targets are:

***Target 3.1: Inventory of stakeholders directly affected by lion conservation completed in each Range State within 2 years***

Activity 3.1.1. Identify stakeholder groups (e.g. local communities, hunting groups, tourism groups) at the appropriate scale
Activity 3.1.2. Identify impacts on each stakeholder group
Activity 3.1.3. Determine extent/magnitude of impacts
Activity 3.1.4. Prioritize groups for intervention based on extent/magnitude of impacts

***Target 3.2: Appropriate training and capacity building delivered to prioritized stakeholders in at least 50 gender- and age- representative groups to assist them to manage lion conservation more effectively in each Range State within 5 years***

Activity 3.2.1. Identify 50 representative stakeholders groups per Range State
Activity 3.2.2. Identify training needs in consultation with identified stakeholders
Activity 3.2.3. Develop and implement training material and programs
Activity 3.2.4. Review effectiveness of training material and program in consultation with identified stakeholders
Activity 3.2.5. Implement adaptive program across lion range

***Target 3.3: Collaboratively developed and area-specific lion management plans agreed and implemented with at least 50 identified stakeholder groups in each Range State within 5 years***

Activity 3.3.1. Consult identified stakeholders
Activity 3.3.2. Determine the scope and scale of the key activities of the management plan
Activity 3.3.3. Identify and integrate 'best practices', making provisions for amongst others:
• Ownership issues
• Zoning for wildlife
• Mutually binding agreement
• Verifiable compliance
• Suitable wildlife utilization plan (e.g. tourism, trophy hunting)
• Income flows and cost distribution (including rainy-day funds to anticipate uncertainties in tourist revenues)
• Appropriate husbandry techniques
• Conflict-mitigation measures
• Regulation of human immigration
• Adequate wildlife and conflict monitoring
• Annual environmental audits
Activity 3.3.4. Implement management plan
Activity 3.3.5. Review plan annually and amend where necessary

***Target 3.4: Transparent mechanisms for equitable distribution of lion-related/generated income to identified stakeholders implemented in at least 50 representative groups in each Range State within 5 years***

Activity 3.4.1. Identify income generated from lion conservation
Activity 3.4.2. Distribute generated income according to intensity of lion impact
Activity 3.4.3. Provide appropriate incentives for people in high-conflict areas to relocate to low-conflict areas
Activity 3.4.4. Provide appropriate incentives to discourage immigration into lion range

**OBJECTIVE 4 (POLICY AND LAND USE): To develop and implement harmonious, comprehensive legal and institutional frameworks that provide for the expansion of wildlife-integrated land-use, lion conservation and associated socio-economic benefits in current and potential lion range.**

At the national and landscape levels, lion conservation needs to be embedded in policy and land-use. The following targets apply:

***Target 4.1: Within 5 years, to have at least one new wildlife-integrated land-use plan that secures an existing, or establishes a potentially viable lion population in all Range States***
Activity 4.1.1. Carry out surveys on habitat encroachment in lion Range States
Activity 4.1.2. Review existing land-use plans at national and local level and evaluate the extent to which they integrate wildlife
Activity 4.1.3. Develop wildlife integrated land-use plans
Activity 4.1.4. Submit land-use plans for adoption by relevant authorities
Activity 4.1.5. Ensure implementation and monitoring of the land-use plans
Activity 4.1.6. Monitor and evaluate effectiveness of applied land-use Plans

***Target 4.2: Legal frameworks that provide for integrated lion conservation and associated socio-economic benefits developed, applied and regionally harmonized within 10 years across 80% of the lion Range States***
Activity 4.2.1. Develop regional guidelines to assist harmonization of lion Range States legislation for wildlife integrated land use, lion conservation and associated socio-economic benefits
Activity 4.2.2. Advocate for adoption of the guidelines by SADC
Activity 4.2.3. Advocate for ratification of the guidelines by all Range States
Activity 4.2.4. Advocate for adoption of the guidelines by African Union Parliament
Activity 4.2.5. Make a checklist of relevant legislation in all Range States
Identify weaknesses and gaps
Activity 4.2.6. Agree on a statutory code of practice in each signatory country for wildlife integrated land-use, lion conservation and associated socio-economic benefits
Activity 4.2.7. Develop and implement appropriate institutional frameworks in lion Range States as necessary

***Target 4.3: At least 50% of protected and other defined wildlife areas within the lion range are effectively and adaptively managed within 5 years***
Activity 4.3.1. Identify protected and defined wildlife areas in lion range

Activity 4.3.2. Agree definition and criteria of effective management using WB/WWF Management Effectiveness Tracking Tool (METT) as template
Activity 4.3.3. Evaluate the existence and effectiveness of current management in the identified and potential areas
Activity 4.3.4. Each Range State to prioritize those protected and defined wildlife areas that are not effectively managed
Activity 4.3.5. Develop site-specific wildlife integrated management plans including capacity building, sustainable funding, monitoring and evaluation in prioritized areas
Activity 4.3.6. Implement the management plans
Activity 4.3.7. Monitor and evaluate management effectiveness in protected and other defined wildlife areas within lion range

***Target 4.4: Legal and institutional frameworks providing for integrated lion conservation and associated socio-economic benefits developed and applied nationally by 80% of the lion Range States within 5 years***
Activity 4.4.1. Adopt and apply legal and institutional frameworks providing for integrated lion conservation and associated socio-economic benefits

**OBJECTIVE 5 (POLITICS): To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices.**

A crucial element of lion conservation is the political arena. The objective with regards to politics has the following targets:

***Target 5.1: Global policies, agreements, conventions, and other instruments relevant to lion conservation, that are not conflicting with national/regional policies of lion Range States are encouraged within two CoP cycles of CITES, CBD, and CMS and thereafter***
Activity 5.1.1. Make databases on lion numbers in each Range State available to all decision makers
Activity 5.1.2. Promote consensus amongst Range States for categorization of the African lion at the CMS and CITES Conventions
Activity 5.1.3. Advocate for support for listings of the African lion consistent with the aspirations of this Conservation Strategy
Activity 5.1.4. Attend CITES, CBD and CMS CoP's to ensure decisions are consistent with the aspirations of this Conservation Strategy

***Target 5.2: Accommodation of this Conservation Strategy by worldwide domestic policies and measures promoted during the next 10 years***
Activity 5.1.1. Distribute this Conservation Strategy
Activity 5.2.2. Secure funding for the implementation of workshops, dialogue sessions and meetings
Activity 5.2.3. Appoint a facilitator (IUCN) for the dialogue sessions
Activity 5.2.4. Appoint a mediator (IUCN) between Range States and non-Range States which have policies that conflict with this Conservation Strategy

Activity 5.2.5. Maintain on-going dialogue with non-Range States to get their co-operation and funding support

**OBJECTIVE 6 (TRADE): To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade.**

Illegal trade (e.g. for traditional medicine) is a major potential threat, but legal trade must be well regulated in order to conserve current options for lion-related income generation. The following targets were set for trade:

***Target 6.1: Existing legislation and regulations reviewed, where necessary amended, and enforced, to ensure that all trade in lions and lion parts and derivatives are comprehensively covered in all Range States within 5 years***
Activity 6.1.1. Train and coordinate law enforcement officers (Wildlife, Immigration, Customs, Police) to identify lion products
Activity 6.1.2. Review and amend relevant legislation and policies (including prohibiting trade in lion bones).
Activity 6.1.3. Prepare identification toolbox of lion products
Activity 6.1.4. Share information with other Range States
Activity 6.1.5. Put up awareness posters at border (exit and entry points)

***Target 6.2: Sound non-detriment findings made and all CITES requirements fulfilled by all Range State CITES Parties within 5 years***
Activity 6.1.1. Review relevant data on off take and population status
Activity 6.2.2. Domesticate CITES into national laws
Activity 6.2.3. Consult and coordinate at national and regional levels and with trading partners on non-detriment findings
Activity 6.2.4. Conduct training at regional level targeting Scientific Authority staff

***Target 6.3: Regional consensus on sustainable utilization of lions achieved within 5 years***
Activity 6.3.1. Conduct awareness on lion use among decision makers at national and regional levels
Activity 6.3.2. Advocate for wildlife use to be an agenda item at regional meetings (e.g. SADC, EAC, COMESA) that are relevant to national economies
Activity 6.3.3. Collect and analyze relevant information on sustainable use
Activity 6.3.4. Conduct training at regional level on sustainable lion utilization
Activity 6.3.5. Formulate agreements at regional or bilateral level on sustainable lion use
Activity 6.3.6. Consult, consider and reference the Convention on Biological Diversity on principles and guidelines for sustainable use as a guide in monitoring sustainable use and trade

# 6. IMPLEMENTATION OF THE STRATEGY

The principal recommendations for implementation of the Eastern and Southern African Lion Conservation Strategy are as follows:

1. Regional African political bodies (SADC, EAC, COMESA, NBI, etc.) are asked to adopt this Strategy and support its implementation.
2. Lion Range State governments in Eastern and Southern Africa need to work together, share experiences and collaborate on transboundary issues.
3. Lion Range State governments should take action to ensure immediate implementation of the objectives of this Strategy at both the national and regional levels. National action plans for lions are recommended.
4. Lion Range State governments, international donors and other stakeholders should allocate resources for the implementation of this Strategy.
5. IUCN is asked to continue its support for this Strategy initiative through the implementation process, on both the national and regional levels
6. All are requested to inform and encourage all actors in lion conservation to be guided by the regional conservation strategies

This Strategy should lead to harmonized lion conservation and management at the national level, giving Range States common objectives to pursue, targets to aim for, and recommended actions to undertake. It devolves to the wildlife agencies in charge of conservation in each lion Range State to facilitate the coherent implementation of this strategy. The full range of stakeholders should be involved, including from the private sector.

Seeing the urgent need for lion conservation actions to be carried out, Eastern and Southern African lion Range States are encouraged to develop national action plans for lions which have operational status. IUCN Regional Offices are asked to support governments in implementation of the regional strategy and national action plans. The IUCN SSC Cat Specialist Group and the African Lion Working Group are asked to provide technical support to governments, monitor implementation, and facilitate collaboration between nations on the regional and international levels.

The important lion populations identified in Figure 3.2 should be the priority areas for implementation of this Strategy's recommendations and actions. Many of these lion populations are trans-boundary, and their management will require cooperation at the international level.

The conservation community is urged to provide support for the implementation of the Eastern and Southern African Lion Conservation Strategy.

# REFERENCES

Bauer, H., Chardonnet, Ph., Nowell, K. and W. Crosmary. 2005. *Status and distribution of the lion (Panthera leo) in Eastern and Southern Africa*. Background paper, Eastern and Southern African Lion Conservation Workshop, Johannesburg, 8-13 January 2006.

Bauer, H., DeIongh, H.H., Princee, F. and D. Ngantou. 2001. Status and conservation needs of the lion in West and Central Africa. Proceedings of an information exchange workshop, Limbe, Cameroon, June 2001. Conservation Breeding Specialist Group and African Lion Working Group. In French and English.

Bauer, H. and Nowell, K. 2004. Endangered classification for West African Lions. *Cat News* 41: 35-36

Bauer, H. and Van Der Merwe, S. 2004. Inventory of free-ranging lions *P. leo* in Africa. *Oryx* 38(1): 26-31.

Chardonnet, Ph. 2002. *Conservation of the African lion: Contribution to a status survey.* International Foundation for the Conservation of Wildlife, France and Conservation Force, USA.

Ferreras, P. and Cousins, S.H. 1996. *The use of a Delphi technique with GIS for estimating the global abundance of top predators: The lion in Africa*. Unpublished report, International EcoTechnology Research Centre, Cranfield University, UK.

Frank, L.G., Woodroffe, R.B., and Ogada, M. 2005a. People and predators in Laikipia District, Kenya. In *People and Wildlife, conflict or coexistence? Ed. By* R.B. Woodroffe, S. Thirgood and A. Rabinowitz. Cambridge Univ. Press. pp. 86-304.

Frank, L., Hemson, G., Kushnir, H. and C. Packer. 2005b. *Lions, conflict and conservation.* Background paper, Eastern and Southern African Lion Conservation Workshop, Johannesburg, 8-13 January 2006.

Hunter, L. *et al*. In prep. Rangewide *priority setting for the African Lion*. Wildlife Conservation Society, New York.

IUCN-ROSA. 2006. *Development of Regional Conservation Strategies for the African Lion.* Report of IUCN-Regional Office of Southern Africa, Harare, Zimbabwe.

IUCN SSC Cat Specialist Group. 2006. *Conservation Strategy for the Lion in West and Central Africa.* IUCN –Regional Office of Central Africa (BRAO) and the West and Central African Lion Conservation Network (ROCAL). Yaounde, Cameroon.

IUCN SSC Cat Specialist Group. 2004. *Panthera leo*. In: IUCN 2004. *2004 IUCN Red List of Threatened Species.* <www.redlist.org>.

Myers, N. 1975. The silent savannahs. *International Wildlife* 5(5): 5-10.

Nowell, K. 2004. The Cat Specialist Group at CITES COP13. *Cat News* 41 Autumn 2004: 34-35.

Nowell, K. and Bauer, H. 2006. *Eastern and Southern African Lion Conservation Strategy Workshop: Minutes Report*. IUCN SSC Cat Specialist Group.

Nowell, K. and Jackson, P. 1996. *Wild Cats: Status Survey and Conservation Action Plan*. IUCN-The World Conservation Union. Gland, Switzerland.

Packer, C, Ikanda, D., Kissui, B, and Kushnir, H. 2005a. Lion attacks one humans in Tanzania. *Nature* **436**, 927-928.

Packer, C., Whitman, K., Loveridge, A., Jackson, J. III and P. Funston. 2005b. *Impacts of trophy hunting on lions in Eastern and Southern Africa: Recent offtake and future recommendations*. Background paper, Eastern and Southern African Lion Conservation Workshop, Johannesburg, 8-13 January 2006.

Sanderson, E. *et al*. 2002. Planning to save a species: the jaguar as a model. *Conservation Biology* **16**(1): 58-72.

Won Wa Musiti, B., Garreau, J.M., Nuopa, P., Sogbohossou, E., Fondjo, T. and H. Bauer. 2005. *Atelier sur la conservation du lion en Afrique central et de l'ouest.* Rapport d'UICN-BRAC, Douala, Cameroon.

These references can be found online at <www.felidae.org/JOBURG/lion.htm>.

# APPENDIX 1. LOGICAL FRAMEWORK

The Eastern and Southern African Lion Conservation Strategy was defined using the so-called 'logical framework' methodology. This methodology consists of working together on developing the vision and goal of the strategy, and then the problem analysis. Problems are then transformed into objectives; targets are then defined for each objective and activities are defined for each target.

Logical frameworks are a widely accepted management tool accepted, used for improving the performance of interventions. The logical framework facilitates the coherent, logical and succinct presentation of the links between different parts of an intervention and identifies strategic elements (goal, objectives, targets, activities).

**Some terms used** in the logical framework approach:

***Vision***

- Has a wide scope
- Represents the ideal situation
- Very long term (e.g. 25 years), really a 'futuristic dream'

***Goal***

- Represents the ideal situation in the long term (here estimated at 10 years)
- The strategy should contribute to the achievement of the goal, but does not assume full responsibility for it
- The goal must be realistic and measurable

***Objectives***

- A series of specific outcomes to be achieved by implementation of the Strategy to address the problems and achieve the goal
- Timeline of approximately 5 years
- Clear objectives aid the task of planning and implementation

***Target***

- These are the standards by which achievement of the goal and objectives are judged
- Targets usually relate to changes in the scope, extent and magnitude of threats (reduction of pressures)
- Targets should be S.M.A.R.T.: Specific, Measurable, Attainable, Relevant and Time-bound

# Vision, Goal and Goal Targets

| **Vision** | |
|---|---|
| **Ensure a sustainable environment for the mutual benefit of lion populations and people in perpetuity** | |
| **Goal** | **Targets** |
| To secure, and where possible, restore sustainable lion populations throughout their present and potential range within Eastern and Southern Africa, recognizing their potential to provide substantial social, cultural, ecological and economic benefits | All viable lion populations remain stable and 50% of those potentially viable become viable, and 50% of those of doubtful viability become viable or potentially viable, with an increase in lion range of at least 1%, within 10 years |
| | Human and livestock loss reduced by at least 50% in at least half of the lion populations within 10 years |
| | Wildlife conservation-related net benefits to local communities are optimized within 10 years where currently realized, and net benefits are achieved in 50% of areas currently without them within 5 years |

# Objectives, Targets and Activities

| Objective | Target | Activity |
|---|---|---|
| **MANAGEMENT:** To ensure effective conservation management of lions, their habitats and wild prey | Monitoring and survey programs for effective and adaptive lion conservation established throughout the lion range within 3 years | Develop and set up monitoring programs |
| | | Identify and procure appropriate equipment |
| | | Identify key areas for data collection: ecological data, trade data, socio-economic data, etc. |
| | | Train personnel in data capture, management and analysis |
| | | Set up systems for carrying out collaborative surveys across borders with shared lion populations |
| | | Carry out National lion surveys |
| | | Develop and maintain harmonized data bases at National and Regional levels |
| | | Disseminate information as appropriate |
| | Targeted research on ecology, management and mitigation of conflict initiated in representative priority areas in each Range State within 2 years | Identify and prioritize biological and socio-ecological research needs |
| | | Standardize methodology where collaborative research is needed |
| | | Develop and carry out research projects in identified areas and aspects |
| | Capacity building programs for lion conservation, where possible in tandem with research and monitoring, established in 90% of the extant lion range within 5 years | Identify national and regional training needs |
| | | Identify and procure appropriate equipment and funding |
| | | Identify regional centers of excellence for regional training |
| | | Develop and implement capacity building programs for lion conservation |

| | | |
|---|---|---|
| | Considering local ecological conditions, best management standards and practices identified and implemented in all trophy hunted lion populations within 3 years | Identify best practice trophy hunting practices that are acceptable in various areas |
| | | Implement best trophy hunting practices |
| | National lion action plans developed in 90% of the extant lion range within 5 years | Develop national lion action plans in accordance with this Conservation Strategy |
| | | Advocate for adoption by relevant authorities and implementation of national lion action plans |
| **MITIGATION:** To minimize and, where possible, eliminate human-lion related conflicts | Database on human-lion conflict and problem animal control established in each Range State within 3 years | Develop human-lion conflict databases in all lion Range States |
| | | Participatory planning on how to mitigate lion attacks on humans in at least 3 known hotspots |
| | Incidents of human-lion conflict reduced by at least 30% within 5 years while also reducing retaliatory killing | Develop and implement country specific awareness and education package on lion conservation and management |
| | | Develop mechanisms with the livestock sector to reduce livestock predation by lions |
| | Number of lions killed through indiscriminate killings reduced by at least 30% within 5 years after establishment of a baseline | Develop and implement country specific awareness and education package on lion conservation and management |
| | | Develop incentives for communities to use legal PAC in three identified hotspots |
| | Well-staffed unit established in each Range State to conduct rapid response, restrained and precisely targeted PAC within 5 years | Assess needs and management capacity for effective PAC Units in lion Range States within 2 years |
| | | Build capacity for effective PAC Units in each lion Range State in accordance with the needs assessment |
| | Incidences of lion attacks on humans reduced by at least 30% from the current levels within 5 years | Develop and implement collaborative and effective PAC techniques |
| **SOCIO-ECONOMICS:** To equitably distribute the costs and benefits of long-term lion management. | Inventory of stakeholders directly affected by lion conservation completed in each Range State within 2 years | Identify stakeholder groups (e.g. local communities, hunting groups, tourism groups) at the appropriate scale |
| | | Identify impacts on each stakeholder group |
| | | Determine extent/magnitude of impacts |
| | | Prioritize groups for intervention based on extent/magnitude of impacts |
| | Appropriate training and capacity building delivered to prioritized stakeholders in at least 50 gender- and age-representative groups to assist them to manage lion conservation more effectively in each Range State within 5 years | Identify 50 representative stakeholders groups per Range State |
| | | Identify training needs in consultation with identified stakeholders |
| | | Develop and implement training material and programs |
| | | Review effectiveness of training material and program in consultation with identified stakeholders |
| | | Implement adaptive program across lion range |
| | Collaboratively developed and area-specific lion management plans agreed and implemented with at least 50 identified stakeholder groups in each Range State within 5 years | Consult identified stakeholders |
| | | Determine the scope and scale of the key activities of the management plan |

| | | |
|---|---|---|
| | | Identify and integrate 'best practices', making provisions for amongst others:<br>• Ownership issues<br>• Zoning for wildlife<br>• Mutually binding agreement<br>• Verifiable compliance<br>• Suitable wildlife utilization plan (e.g. tourism, trophy hunting)<br>• Income flows and cost distribution (including rainy-day funds to anticipate uncertainties in tourist revenues)<br>• Appropriate husbandry techniques<br>• Conflict-mitigation measures<br>• Regulation of human immigration<br>• Adequate wildlife and conflict monitoring<br>• Annual environmental audits |
| | | Implement management plan |
| | | Review plan annually and amend where necessary |
| | Transparent mechanisms for equitable distribution of lion-related/generated income to identified stakeholders implemented in at least 50 representative groups in each Range State within 5 years | Identify income generated from lion conservation |
| | | Distribute generated income according to intensity of lion impact |
| | | Provide appropriate incentives for people in high-conflict areas to relocate to low-conflict areas |
| | | Provide appropriate incentives to discourage immigration into lion range |
| **POLICY AND LAND USE:**<br>To develop and implement harmonious, comprehensive legal and institutional frameworks that provide for the expansion of wildlife-integrated land-use, lion conservation and associated socio-economic benefits in current and potential lion range | Within 5 years, to have at least one new wildlife-integrated land-use plan that secures an existing, or establishes a potentially viable lion population in all Range States | Carry out surveys on habitat encroachment in lion Range States |
| | | Review existing land-use plans at national and local level and evaluate the extent to which they integrate wildlife |
| | | Develop wildlife integrated land-use plans |
| | | Submit land-use plans for adoption by relevant authorities |
| | | Ensure implementation and monitoring of the land-use plans |
| | | Monitor and evaluate effectiveness of applied land-use Plans |
| | Legal frameworks that provide for integrated lion conservation and associated socio-economic benefits developed, applied and regionally harmonized within 10 years across 80% of the lion Range States | Develop regional guidelines to assist harmonization of lion Range States legislation for wildlife integrated land use, lion conservation and associated socio-economic benefits |
| | | Advocate for adoption of the guidelines by SADC |
| | | Advocate for ratification of the guidelines by all Range States |
| | | Advocate for adoption of the guidelines by African Union Parliament |
| | | Make a checklist of relevant legislation in all Range States |
| | | Identify weaknesses and gaps |
| | | Agree on a statutory code of practice in each signatory country for wildlife integrated land-use, lion conservation and associated socio-economic benefits |
| | | Develop and implement appropriate institutional frameworks in lion Range States as necessary |

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|---|---|---|
| | At least 50% of protected and other defined wildlife areas within the lion range are effectively and adaptively managed within 5 years | Identify protected and defined wildlife areas in Lion range |
| | | Agree definition and criteria of effective management using WB/WWF Management Effectiveness Tracking Tool (METT) as template |
| | | Evaluate the existence and effectiveness of current management in the identified and potential areas |
| | | Each Range State to prioritize those protected and defined wildlife areas that are not effectively managed |
| | | Develop site-specific wildlife integrated management plans including capacity building, sustainable funding, monitoring and evaluation in prioritized areas |
| | | Implement the management plans |
| | | Monitor and evaluate management effectiveness in protected and other defined wildlife areas within Lion range |
| | Legal and institutional frameworks providing for integrated lion conservation and associated socio-economic benefits developed and applied nationally by 80% of the lion Range States within 5 years | Adopt and apply legal and institutional frameworks providing for integrated lion conservation and associated socio-economic benefits |
| **POLITICS:** To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices | Global policies, agreements, conventions, and other instruments relevant to lion conservation, that are <u>not</u> conflicting with national/regional policies of lion Range States are encouraged within two CoP cycles of CITES, CBD, and CMS and thereafter | Make databases on lion numbers in each Range State available to all decision makers |
| | | Promote consensus amongst Range States on issues concerning the African lion at the CMS and CITES Conventions |
| | | In case of any listing, advocate for consistency with the aspirations of this Conservation Strategy |
| | | Attend CITES, CBD and CMS CoP's to ensure decisions are consistent with the aspirations of this Conservation Strategy |
| | Accommodation of this Conservation Strategy by worldwide domestic policies and measures promoted during the next 10 years | Distribute this Conservation Strategy |
| | | Secure funding for the implementation of workshops, dialogue sessions and meetings |
| | | Appoint a facilitator (IUCN) for the dialogue sessions |
| | | Appoint a mediator (IUCN) between Range States and non-Range States which have policies that conflict with this Conservation Strategy |
| | | Maintain on-going dialogue with non-Range States to get their co-operation and funding support |
| **TRADE:** To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade | Existing legislation and regulations reviewed, where necessary amended, and enforced, to ensure that all trade in lions and lion parts and derivatives are comprehensively covered in all Range States within 5 years | Train and coordinate law enforcement officers (Wildlife, Immigration, Customs, Police) to identify lion products |
| | | Review and amend relevant legislation and policies (including prohibiting trade in lion bones). |
| | | Prepare identification toolbox of lion products |
| | | Share information with other Range States |
| | | Put up awareness posters at border (exit and entry points) |

| | | |
|---|---|---|
| | Sound non-detriment findings made and all CITES requirements fulfilled by all Range State CITES Parties within 5 years | Review relevant data on off take and population status |
| | | Domesticate CITES into national laws |
| | | Consult and coordinate at national and regional levels and with trading partners on non-detriment findings |
| | | Conduct training at regional level targeting Scientific Authority Staff |
| | Regional consensus on sustainable utilization of lions achieved within 5 years | Conduct awareness on lion use among decision makers at national and regional levels |
| | | Advocate for wildlife use to be an agenda item at regional meetings (e.g. SADC, EAC, COMESA) that are relevant to national economies |
| | | Collect and analyze relevant information on sustainable use |
| | | Conduct training at regional level on sustainable lion utilization |
| | | Formulate agreements at regional or bilateral level on sustainable lion use |
| | | Consult, consider and reference the CBD Principles and Guidelines for Sustainable Use as a guide in sustainable use |

# APPENDIX 2. ACKNOWLEDGEMENTS

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# APPENDIX 3. PARTICIPANTS STRATEGIC PLANNING SESSION

| Surname | Name | Position | Organisation | Country |
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|---|---|---|---|---|
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| Gomera | Maxwell | Program Manager | IUCN ROSA | Zimbabwe |
| Gwature | Caroline | Media &Communications Assistant | IUCN ROSA | Zimbabwe |
| Hakim | Salah | Deputy Secretary General | Higher Council for the Environment and Natural Resources | Sudan |
| Hasheela | Raili | Conservation Scientist | Ministry of Environment & Tourism | Namibia |
| Hunter | Luke | Global Carnivore Program Coordinator | WCS – Wildlife Conservation Society | USA |
| Jackson | John | Chairman | Conservation Force | USA |
| Jamusana | Haxwell | Deputy Director | National Parks & Wildlife | Malawi |
| Jonga | Charles | Director | CAMPFIRE Association | Zimbabwe |
| Kasiki | Samuel | Senior Research Scientist | Kenya Wildlife Service | Kenya |
| Kibebe | Julius | Wildlife Officer- Endangered Species | Wildlife Division | Tanzania |
| Kipng'etich | Julius | Director | Kenya Wildlife Service | Kenya |
| Loveridge | Andrew | Researcher | Hwange Lion Research/WILDCRU, Oxford | Zimbabwe |
| Machena | Cecil | | | Zimbabwe |
| Mapesa | Moses | Executive Director | Uganda Wildlife Authority | Uganda |
| Macie | Isabel | Deputy Director - Conservation | Ministry of Tourism, Directorate of Conservation | Mozambique |
| Mbidzo | Meed | Conservation Scientist | Ministry of Environment & Tourism | Namibia |
| Mduma | Simon | Ag Director General | Tanzania Wildlife Research Institute | Tanzania |
| Meintjes | Sonja | Assistant Director: Compliance | Department of Environmental Affairs of Toursim | South Africa |
| Milliken | Tom | Director | TRAFFIC ESA | Zimbabwe |
| Mills | Gus | Research Fellow | SANPARKS | RSA |
| Mohamed | Abdukadir Luta | Secretary General | Tanzania Hunting Operators Association | Tanzania |
| Monks | Norman | Senior Warden (Research & Operations) | Parks and Wildlife Management Authority | Zimbabwe |
| Murombedzi | James | Regional Director | IUCN ROSA | Zimbabwe |

| | | | | |
|---|---|---|---|---|
| Neo-Mahupeleng | Gosiame | Project Officer - Wildlife & Large Carnivore Research | African Wildlife Foundation | Botswana |
| Nhampossa | Anibal | Conservation Programme Officer | Ministry of Tourism | Mozambique |
| Nicholls | Kate | Co-Principal | Okavango Lion Conservation Project | Botswana |
| Nowell | Kristin | Core Group / Director | Cat Specialist Group/ CAT – Cat Action Treasury | USA |
| Ntahuga | Laurent | Regional Technical coordinator - biodiversity & Species | IUCN/EARO | Kenya |
| Ossoble | Ali Osman | Development Adviser of Prime Minister of Somalia | Somali Government (TFG) | Somalia |
| Packer | Craig | Lion Researcher | TAWIRI / University of Minnesota | Tanzania |
| Pangeti | George | Coordinator of African Programs | Safari Club International Foundation | Zimbabwe |
| Patterson | Claire | Programme Officer | TRAFFIC ESA | South Africa |
| Rushemeza | Jean | Conseiller Technique | INECN | Burundi |
| Rutina | Lucas | Principal Wildlife Biologist | DWNP | Botswana |
| Ruzigandekwe | Fidele | Executive Director | Rwanda Office for Tourism and National Parks | Rwanda |
| Sangarwe | Margaret | Permanent Secretary | Ministry of Environment and Tourism | Zimbabwe |
| Sello | Leseho | Chief Director: Biodiversity and Heritage | Department of Environmental Affairs of Toursim | South Africa |
| Taylor | Russell | Conservation Programme Director | WWF SARPO | Zimbabwe |
| Travers | William | CEO | Born Free Foundation | England |
| van der Merwe | Sarel | Chair | African Lion Working Group | South Africa |
| Williams | Stuart | Team Leader | MoARD/UNDP/GEF Protected Area System of Ethiopia | Ethiopia |
| Winterbach | Christiaan | Director | TAU Consultants | Botswana |
| Zacharia | Miriam | Senior Game Officer | Wildlife Division, Ministry of Natural Resources and Tourism | Tanzania |

# APPENDIX 4. PARTICIPANTS TECHNICAL SESSION

| NAME | ORGANIZATION | COUNTRY |
|---|---|---|
| Amir, Osman | Somalia Ecological Society | Somalia |
| Bauer, Hans | Leiden University | Holland |
| Begg, Colleen | Sociedade para a Gestão e Desenvolvimento da Reserva do Niassa | Mozambique |
| Bijl, Bouke*** | Private biologist | Malawi |
| Breitenmoser, Urs** | Cat Specialist Group (IUCN/SSC) | Switzerland |
| Byrne, Bob** | Safari Club International Foundation | USA |
| Chardonnet, Philippe | International Foundation for the Conservation of Wildlife | France |
| Coppolillo, Pete | WCS | Tanzania |
| Driciru, Margaret | Uganda Wildlife Authority | Uganda |
| Dublin, Holly* | IUCN/SSC | South Africa |
| Frank, Lawrence | WCS/University of California | Kenya |
| Funston, Paul | Tshwane Tek. | South Africa |
| Hunter, Luke* | WCS | USA |
| John Jackson** | Conservation Force | USA |
| Jamusana, Haxwell*** | Dept. National Parks & Wildlife | Malawi |
| Lichtenfeld, Laly | People and Predators Fund | USA/Tanzania |
| Lobora, Alex | Tanzania Wildlife Research Institute | Tanzania |
| Loveridge, Andy | Hwange Lion Research/WILDCRU, Oxford | Zimbabwe/UK |
| Marjan, Malik | Boma Wildlife Training Centre | Sudan |
| Mills, Gus | SAN Parks | South Africa |
| Minkowski, Karen* | WCS | USA |
| Monks, Norman | Parks and Wildlife Management Authority | Zimbabwe |
| Mubalama, Leonard | WCS- DRC | DR Congo |
| Nowell, Kristin* | Cat Action Treasury / IUCN SSC Cat Specialist Group | USA |
| Packer, Craig | University of Minnesota | USA/Tanzania |
| Pangeti, George** | Safari Club International Foundation | Zimbabwe |
| Purchase, Netty | Self | Zimbabwe |
| Sanderson, Eric* | WCS | NY, USA |
| Siefert, Ludwig | Makerere University | Uganda |
| Van der Merwe, Sarel | African Lion Working Group | South Africa |
| Vaz Pinto, Pedro*** | Private biologist | Angola |
| Verissimo, Luis Miguel Neto*** | Private biologist | Portugal/Angola |
| White, Paula | Center for Tropical Research/ZAWA | USA/Zambia |
| Williams, Nicole* | WCS | USA |
| Williams, Stuart | UNDP/GEF | Ethiopia |
| Winterbach, Christiaan | TAU Consultants | Botswana |

* Organizer
** Observer
***Contributed to RWPS but did not attend workshop

# APPENDIX 5. FRENCH TRANSLATION CHAPTERS 4-6

To facilitate regional cooperation in African lion conservation, we have translated Chapters 4-6 of the Regional Conservation Strategy for the Lion in Eastern and Southern Africa into French.

Afin de faciliter la coopération régionale dans le cadre de la conservation du lion africain, les chapitres 4 et 6 de la Stratégie Régionale de Conservation du Lion en Afrique de l'Est et du Sud ont été traduits en français.

## 4. MENACES

Le principal problème débattu pendant l'atelier sur la conservation du lion en Afrique de l'Est et du Sud a été la réduction du territoire et des effectifs du lion. Chaque session de l'atelier a analysé séparément ces problèmes en utilisant différentes méthodes et perspectives.

Pour la session technique de l'atelier, il a été demandé aux participants d'identifier les menaces actuelles à chaque population de lions de la zone (Chapitre 3). Les menaces les plus importantes identifiées sont : l'abattage indiscriminé des lions, la chasse des proies du lion pour la subsistance ou pour le commerce de la viande de brousse, la petite taille des populations, l'empiètement de l'habitat par l'élevage. La gestion inadéquate de la chasse sportive du lion est aussi considérée comme défavorisant plusieurs populations de lions. La session technique a ensuite procédé au classement des facteurs identifiés suivant leur impact supposé sur la viabilité des populations de lions de la région. La chasse sportive a été exclue de cette analyse à cause de la difficulté à distinguer les impacts négatifs biologiques potentiels sur les populations de lions dans les cas d'une mauvaise gestion des prélèvements des impacts socio-économiques positifs potentiels sur la conservation du lion. Une chasse sportive bien gérée est considérée comme une solution importante à la conservation à long terme du lion. Les facteurs primordiaux sont par ordre d'importance : la disponibilité de proies, l'abattage incontrôlé des lions, la taille et l'étendue des populations de lions, la proportion d'habitat naturel disponible et l'efficacité de la gestion pour la conservation du lion. Parmi les autres facteurs on peut citer la taille des populations de lions, la qualité de l'habitat, le statut de la population de lions ainsi que la présence de bétail domestique. La session technique a aussi décrit les facteurs qui limitent l'extension de l'aire de distribution du lion. Les principaux incluent la densité humaine, la densité de bétail, l'abattage incontrôlé des lions et l'insuffisance des proies.

La session de planification stratégique a analysé les menaces aux lions sur le plan régional et a commencé à identifier les causes premières. Ces causes premières sont de première importance pour les gouvernements des Etats de l'aire de distribution. A moins de s'intéresser aux causes telles que le remplacement des proies sauvages par le bétail par exemple, les menaces sont peu susceptibles d'être levées.

La majorité des problèmes relatifs à la conservation du lion proviennent de la croissance démographique et de la pauvreté. L'accroissement des populations démunies conduit à un envahissement croissant des habitats du lion par les hommes. Ceci se fait surtout par les activités d'agriculture et d'élevage nécessaires pour soutenir les besoins des hommes aussi bien dans les milieux ruraux qu'urbains. Pour les lions, il en résulte une perte d'habitat, une fragmentation de la population et une réduction des proies

sauvages. En même temps que les contacts entre les hommes et les lions augmentent, les conflits hommes-lions augmentent entraînant une réduction des effectifs de lions (à travers l'empoisonnement, le piégeage et l'abattage), et un désintéressement des communautés locales de la conservation du lion.

Une autre cause des problèmes dans la conservation du lion est les conflits armés. Outre les coûts énormes aux populations, à la société et l'économie, par rapport aux lions et à la faune en général, la guerre empêche le tourisme et facilite le braconnage de la faune ainsi que le commerce illégal exacerbé par la libre circulation des armes à feu et l'anarchie qui règne.

Certaines causes premières sont externes à l'Afrique. Les économies africaines basées sur l'exploitation de la faune dépendent des touristes du Nord (aussi bien pour le safari photo que pour la chasse sportive) pour générer des devises étrangères. Ceci les rend vulnérable au développement extérieur. Ainsi le terrorisme par exemple entraîne un déclin général du tourisme international. De plus, les Gouvernements Occidentaux et les groupes de Conservation fournissant un financement significatif à la conservation en Afrique, les gouvernements africains trouvent difficile de dicter leur propre loi pour le mieux-être de leurs citoyens car ils dépendent du bon vouloir des donneurs et des politiques de conservation de l'Occident.

Ces causes premières entraînent un certain nombre de problèmes pour la conservation du lion qui peuvent être regroupés comme suit.

### *4.1. Gestion*

Une gestion améliorée des populations de lions aiderait à résoudre beaucoup de problèmes de conservation de l'espèce. Par exemple, la prise de décision de gestion doit être fondée sur une connaissance de la distribution du lion, de son statut et de la tendance évolutive des populations quoique dans beaucoup de zones il y ait insuffisance de données sur ces aspects ainsi que sur d'autres aspects de l'écologie du lion. On déplore une importante absence de financement par les gouvernements et un manque général d'expertise pour le monitoring et la gestion des populations de lions. La capacité de gestion peut être améliorée par le développement de plans d'action nationaux pour le lion pour une utilisation optimale des ressources limitées afin d'atteindre de façon significative les objectifs nationaux. La chasse sportive est une importante source de revenu et un instrument de gestion pour les gouvernements mais il se pose des questions sur la durabilité des prélèvements effectués dans certaines régions. Packer *et al.* (2005b) ont recommandé un certain nombre de meilleures pratiques pour la gestion durable, y compris le principe de limiter les prélèvement aux males les plus âgés afin de minimiser les impacts sur la reproduction du lion. Les pratiques africaines traditionnelles de chasse du lion constituent aussi une menace pour les lions dans certaines zones et doivent être gérées durablement.

### *4.2. Atténuation*

Le conflit hommes-lion est un problème fondamental dans la conservation du lion (Frank *et al*., 2005b). Les lions exercent une déprédation sur le bétail domestique, surtout quand les proies naturelles, ont diminué et en retour sont tués par les populations. Dans certaines régions de l'Afrique, les pertes en vies humaines surviennent à une régularité effrayante. Quand les conflits sont importants, ils réduisent la viabilité des populations de lions et conduisent à un rejet de la conservation par les communautés locales. Les meilleures mesures sont préventives et se basent sur les techniques endogènes africaines de garde du bétail telles que l'utilisation de chiens de garde, le regroupement des troupeaux, et l'enfermement du bétail dans des enclos solides la nuit (Frank *et al*.,

2005b). Même s'il y a dedommagement et ou assurance pour les pertes causees par les prédateurs, ces mesures sont plus efficaces si elles sont combinés avec les mesures préventives. Les conflits entre les hommes et les lions ne pouvant disparaître totalement, les gouvernements doivent mettre sur pied une équipe efficace de contrôle des animaux à problèmes, qui s'occupera de la résolution des problèmes quand les mesures de prévention se révéleront inefficaces. De plus, la tolérance doit être encouragée dans certains cas (voir prochaine section).

### *4.3. Socio-economie*

Dans toute l'Afrique, le lion est perçu par les communautés locales comme ayant une valeur économique négative, aussi bien à cause des pertes de vie humaine et de bétail qu'à cause de la restriction d'opportunités génératrices de revenus due à l'immobilisation de terres pour la protection de l'habitat et des proies naturelles du lion. Les mesures de conservation locales du lion ayant souvent été développées sans concertation avec et participation des communautés locales, leurs besoins et capacités sont occultés, ce qui résulte en un manque de support de la conservation du lion et souvent un défaut de gestion. Les bénéfices issus de la conservation du lion, en particulier ceux économiques doivent être partagés équitablement avec les communautés locales, que la gestion soit étatique ou privée. L'approche la plus bénéfique pour tous reconnue est celle intégrant la conservation et le développement.

### *4.4. Politique et mode d'utilisation des terres*

Les modes d'utilisation des terres intégrant la faune compétissent avec les modes d'utilisation dominés par les hommes (agriculture, pastoralisme, habitations), et échouent souvent du fait du manque de soutien politique. Les cadres légaux nationaux et les structures d'encouragement doivent être développés pour promouvoir les formes d'utilisation des terres intégrant la faune comme forme de développement rural. Ces cadres légaux doivent être harmonisés régionalement pour un maximum d'impact pour la conservation de la faune. A beaucoup d'endroits, les formes d'utilisation des terres, les politiques et l'aménagement intégrant la faune sont inexistants. Quand elles existent, elles sont souvent définies sans transparence et participation des populations, et/ou ne sont pas efficacement mises en œuvre. Ceci entraîne un désintérêt pour les formes d'utilisation des terres intégrant le lion et les proies dans les principaux habitats du lion.

### *4.5. Politiques*

Les accords multilatéraux sur l'environnement et les Conventions internationales (CBD, CITES, CMS, etc.) sont souvent peu intégrés aux politiques régionales et/ou nationales et quelquefois vont à l'encontre de l'exploitation durable des lions. Les politiciens sont peu informés des questions relatives à la conservation en général et aux lions en particulier, qui sont peu abordés dans l'agenda politique. Les politiques internationales définissent les conditions d'une gestion durable des populations de lions et ainsi influencent les revenus issus du lion dans les Etats de l'aire de distribution. Cette capacité est compromise par les groupes qui ont des perspectives différentes de conservation et s'opposent à l'utilisation durable.

### *4.6. Commerce*

Le commerce légal des produits du lion concerne surtout les trophées. Pour s'assurer que ce commerce est durable, il faut se référer aux meilleures pratiques de gestion de la chasse et de suivi. Il existe aussi un commerce illégal des lionceaux, des peaux, des parties du corps et d'autres dérivatifs pour la médecine traditionnelle et comme souvenirs ou curiosités. Néanmoins il manque des données pour évaluer l'importance de la menace que représente ce commerce. Le commerce illégal est surtout dû à l'inefficacité des lois due à son tour à la faible capacité et motivation des institutions

chargées du respect des lois ainsi que du manque de connaissances sur ce commerce. Le commerce légal pour être viable doit être mieux régulé à travers les législations nationales, l'application de la CITES, et les accords régionaux.

La stratégie de conservation du lion d'Afrique de l'Est et du Sud s'articule autour de six groupes de menaces dans le prochain chapitre.

# 5. LA STRATEGIE REGIONALE DE CONSERVATION DU LION

La stratégie de conservation du lion d'Afrique de l'Est et du Sud a été élaborée durant un atelier de planification stratégique pluridisciplinaire (liste des participants à l'annexe 3) avec une forte représentativité des états de l'aire de distribution du lion. Les participants à l'atelier ont choisi de développer une stratégie commune pour l'Afrique de l'Est et du Sud plutôt que deux stratégies régionales.

La vision à long terme de la stratégie est**: un environnement viable pour le bénéfice mutuel des populations de lions et des peuples à perpétuité**.
Cette vision reconnaît que la conservation du lion doit être considérée dans une large perspective, intégrant les aspects sociaux et écologiques de la conservation durable des ressources naturelles.

Le **but** de la stratégie est: **de sécuriser et si possible restaurer des populations viables de lions à travers leur aire actuelle et potentielle de distribution en Afrique Australe et Orientale, en reconnaissant leur potentiel à procurer des bénéfices sociaux, culturels, écologiques et économiques.**

Ce but comporte trois éléments:

1. Conserver les populations de lions existantes
2. Restaurer les populations où c'est possible
3. Procurer des bénéfices sociaux, écologiques et économiques

Les objectifs spécifiques sont définis pour les trois composants du but ; ces objectifs représentent la triple ambition pour les dix prochaines années :

1. toutes les populations viables de lions restent stables et 50% des populations potentiellement viables deviennent viables ; 50% des populations à viabilité douteuse deviennent viables ou potentiellement viables avec un accroissement de l'aire de distribution d'au moins 1% d'ici 10 ans ;

2. les pertes en vies humaines et de bétail sont réduites d'au moins 50% pour au moins la moitié des populations de lions en 10 ans ;

3. les bénéfices nets relatifs à la conservation de la faune pour les populations locales sont optimisés là où elles sont actuellement réalisées et des bénéfices nets sont réalisés dans 50% des aires où ils n'existent pas actuellement en 5 ans.

Six objectifs spécifiques ont été définis pour la stratégie de conservation du lion à partir de l'analyse des problèmes par les participants. Chaque objectif est associé à des résultats qui doivent être réalisés pour que les objectifs soient atteints avec un ensemble d'activités à accomplir. La stratégie a été développée à travers un cadre logique décrit en annexe 1.

**Objectif 1 (Aménagement): Assurer la conservation et la gestion effective des lions, de leur habitats et de leurs proies sauvages**

Les lions ont besoin d'un habitat adéquat avec des proies suffisantes pour leur survie, et une conservation efficace est nécessaire en vue de lever les menaces décrites dans le chapitre 4. Les résultats et activités de gestion sont :

**Cible 1.1. Des programmes de suivi et d'inventaire pour une conservation efficace et adéquate sont établis dans toute l'aire de distribution d'ici 3 ans.**

Activité 1.1.1. Développer et mettre en place des programmes de monitoring.
Activité 1.1.2. Identifier et acquérir un équipement adéquat.
Activité 1.1.3. Identifier les aires clés pour la collecte de données écologiques, sur le commerce et socio-économiques.
Activité 1.1.4. Former le personnel sur la collecte de données, la gestion et l'analyse.
Activité 1.1.5. Faire des inventaires nationaux des lions.
Activité 1.1.6. Développer et mettre à jour des bases de données harmonisées au niveau national et sous-régional.
Activité 1.1.7. Disséminer autant que possible les informations.

**Cible 1.2. La recherche dans les domaines de l'écologie, la gestion et l'atténuation des conflits est initiée dans les aires prioritaires représentatives dans chaque état de l'aire de distribution d'ici 2 ans.**

Activité 1.2.1. Identifier et prioriser les besoins en recherche biologique et socio-écologique.
Activité 1.2.2. Standardiser la méthodologie quand la recherche collaborative est nécessaire.
Activité 1.2.3. Développer et conduire des projets de recherche dans les aires identifiées sur des aspects ciblés.

**Cible 1.3. Des projets de renforcement des capacités en conservation des lions, et si possible en tandem avec la recherche et le monitoring, sont initiés dans 90% de l'aire de répartition du lion d'ici 5 ans.**

Activité 1.3.1. Identifier les besoins de formation nationaux et régionaux.
Activité 1.3.2. Identifier et procurer l'équipement approprié et le financement.
Activité 1.3.3. Identifier des centres d'excellence régionaux pour des formations d'envergure régionale.
Activité 1.3.4. Développer et mettre en oeuvre des programmes de formation de capacités pour la conservation du lion.

**Cible 1.4. Considérant les conditions écologiques locales, les meilleurs standards de gestion et pratiques sont identifiés et mises en oeuvre dans toutes les populations de lions soumises à la chasse sportive les 3 prochaines années.**

Activité 1.4.1. Identifier les meilleures pratiques de chasse sportive acceptables dans diverses zones.
Activité 1.4.2. Mettre en œuvre les meilleures pratiques de chasse au trophée.

**Cible 1.5. Des plans d'action nationaux pour le lion sont développés dans 90% de l'aire de distribution dans les 5 prochaines années.**

Activité 2.1.1. Développer des plans d'action nationaux en accord avec la Stratégie de Conservation.
Activité 2.1.1. Plaider pour l'adoption plans d'action nationaux pour le lion par les autorités compétentes et leur mise en œuvre.

**Objectif 2 (Mitigation): Minimiser et si possible éliminer les conflits hommes-lions.**

La perte de bétail, et dans certains cas, celles de vies humaines est la principale cause de l'abattage des lions. Un objectif spécifique a été formulé par rapport au conflit hommes-lion. 5 résultats sont définis pour la réduction des conflits.

**Cible 2.1. Une base de données sur le conflit homme-lion et le contrôle des animaux à problème est établie dans chaque Etat de l'aire de distribution d'ici 3 ans**

Activité 2.1.1. Développer une base de données sur les conflits hommes-lions dans tous les Etats de l'aire de distribution.
Activité 2.1.2. Développer un plan participatif de mitigation des attaques des lions sur les hommes dans au moins trois grandes zones de conflits reconnus.

**Cible 2.2. Les incidents relatifs aux conflits homme-lions sont réduits d'au moins 30 % en 5 ans, reduisant ainsi les abattages de revanche.**

Activité 2.2.1. Développer et mettre en œuvre une sensibilisation spécifique par pays et un paquet d'éducation sur la conservation et la gestion du lion.
Activité 2.2.2. Développer des mécanismes avec le secteur de l'élevage du bétail pour réduire la prédation du bétail par le lion.

**Cible 2.3. Le nombre de lions tués de façon indiscriminée est réduit d'au moins 30 % en 5 ans après l'établissement d'un etat des lieux**

Activité 2.3.1. Développer et mettre en œuvre une sensibilisation spécifique par pays et un 'paquet' d'éducation sur la conservation et la gestion du lion
Activité 2.3.2. Encourager les communautés à utiliser les méthodes légales de contrôle des animaux à problème dans au moins trois grandes zones de conflits reconnus.

**Cible 2.4. Un personnel bien formé est établi dans chaque Etat de l'aire de distribution pour conduire un contrôle des animaux à problèmes (PAC) rapide, restreint et précis.**

Activité 2.4.1. Evaluer les besoins et les capacités de gestion pour des PAC effectifs dans les états de l'aire de distribution du lion d'ici 2 ans.
Activité 2.4.2. Former des capacités sur les méthodes efficaces de contrôle des animaux à problèmes dans chaque Etat de l'aire de distribution en accord avec l'évaluation des besoins

**Cible 2.5. Les incidences des attaques des lions sur les hommes sont réduits d'au moins 30 % des niveaux actuel avant 5 ans.**

Activité 2.5.1. Développer et réaliser des techniques efficaces et en commun de PAC.

**Objectif 3 (Socio-économie): Distribuer équitablement les coûts et les bénéfices de la gestion à long terme du lion.**

L'objectif précédent était relatif à la perte et celui-ci traite de l'opportunité pour les populations de bénéficier de la conservation du lion. Par rapport aux aspects socio-économiques, les communautés locales peuvent être motivées à contribuer à la conservation du lion. Les résultats en socio-économie sont :

**Cible 3.1. Le recensement de tous les acteurs directement concernés par la conservation du lion est effectué dans tous les états de l'aire de distribution d'ici deux ans.**

Activité 3.1.1. Identifier les groupes d'acteurs (exemples : communautés locales, groupes de chasse, groupes de tourisme) à l'échelle appropriée.
Activité 3.1.2. Identifier les impacts sur chaque groupe d'acteurs.
Activité 3.1.3. Déterminer la portée des impacts.
Activité 3.1.4. Prioriser les groupes pour une intervention basée sur la portée des impacts.

**Cible 3.2. Une formation et une remise à niveau appropriée sont offerts aux groupes d'acteurs prioritaires dans au moins 50 groupes représentatifs sur le plan du genre et de l'âge pour les aider à gérer plus efficacement la conservation du lion dans chaque Etat de l'aire de répartition d'ici 5 ans.**

Activité 3.2.1. Identifier 50 groupes représentatifs d'acteurs par Etat.
Activité 3.2.2. Identifier les besoins en formation en consultation avec les acteurs identifiés.
Activité 3.2.3. Développer et mettre en œuvre du matériel de formation et des programmes.
Activité 3.2.4. Contrôler l'efficacité du matériel et des programmes de formation en consultation avec les acteurs identifiés.
Activité 3.2.5. Mettre en œuvre des programmes adaptés à travers l'aire de distribution.

**Cible 3.3. Les plans de gestion des lions développés de façon participative et spécifique au milieu sont acceptés et mis en œuvre avec au moins 50 groupes d'acteurs identifiés dans chaque Etat de l'aire avant 5 ans.**

Activité 3.3.1. Consulter les acteurs identifiés.
Activité 3.3.2. Déterminer la portée et l'échelle des activités principales du plan d'aménagement.
Activité 3.3.3. Identifier et intégrer les 'meilleures pratiques' et faire une provision des autres :
• Questions de propriété
• Zonage pour la faune
• Accord mutuel
• Observations vérifiables
• Plan d'utilisation appropriée de la faune (ex tourisme, chasse sportive)
• Flux de revenues et distribution des coûts (y compris des fonds du fait des imprévus possibles dans les revenus du tourisme)
• Techniques adéquates d'élevage
• Mesures de réduction des conflits
• Régulation de l'immigration des hommes
• Suivi adéquat de la faune et des conflits

• Audits annuels environnementaux.
Activité 3.3.4. Réaliser les plans d'aménagement.
Activité 3.3.5. Réviser annuellement les plans et quand nécessaire les amender.

**Cible 3.4. Des mécanismes transparents pour la distribution équitable des revenus générés par les lions aux acteurs identifiés sont mis en œuvre dans au moins 50 groupes représentatifs dans chaque Etat d'ici 5 ans**

Activité 3.4.1. Identifier les revenus générés par la conservation du lion.
Activité 3.4.2. Distribuer les revenus générés selon l'intensité de l'impact du lion.
Activité 3.4.3. Inciter les populations à immigrer des zones à fort taux de conflits à celles à faible taux de conflit.
Activité 3.4.4. Fournir les encouragements appropriés pour décourager l'immigration vers les territoires du lion.

**Objectif 4 (Politique et utilisation de terres) : Développer et mettre en oeuvre des cadres juridiques et institutionnels harmonieux et complets qui encouragent l'extension de modes d'utilisation des terres intégrant la faune, la conservation du lion et les bénéfices socio-économiques y associés dans l'aire de distribution actuelle et potentielle du lion.**

La conservation du lion doit être intégrée à la politique et utilisation des terroirs aux niveaux des terroirs et national.

**Cible 4.1. D'ici 5 ans, il faudrait avoir au moins un plan de gestion des terroirs intégrant la faune qui sécurise ou établit une population de lions potentiellement viable dans les Etats de l'aire de distribution.**

Activité 4.1.1. Conduire des dénombrements sur l'empiètement des habitats du lion dans les Etats de l'aire de distribution.
Activité 4.1.2. Examiner les plans d'aménagement des terroirs au niveau national et local et évaluer à quel degré ils intègrent la faune.
Activité 4.1.3. Développer des plans d'aménagement du terroir intégrant la faune.
Activité 4.1.4. Soumettre les plans d'utilisation des terres pour adoption aux autorités compétentes.
Activité 4.1.5. S'assurer de la mise en œuvre et du suivi de ces plans d'utilisation des terres.
Activité 4.1.6. Suivre et évaluer l'efficacité des plans appliqués d'utilisation des terres.

**Cible 4.2. Les cadres légaux intégrant la conservation du lion et associant les bénéfices socio-économiques sont développés, réalisés et harmonisés régionalement dans les 10 prochaines années dans 80% des Etats de l'aire de distribution**

Activité 4.2.1. Développer des directives régionales afin d'assister l'harmonisation de la législation.
Activité 4.2.2. Plaider en faveur de l'adoption des directives par la SADC.
Activité 4.2.3. Plaider en faveur de la ratification des directives par tous les Etats.
Activité 4.2.4. Plaider en faveur de l'adoption des directives par le Parlement de l'Union Africaine.
Activité 4.2.5. Faire une liste des législations pertinentes dans chacun des Etats de l'aire – Identifier les faiblesses et lacunes.

Activité 4.2.6. S'entendre sur le code statutaire de pratique dans chacun des états signataires pour une utilisation des terres intégrant la faune, la conservation du lion et les avantages socio-économiques associés.
Activité 4.2.7. Développer et mettre en œuvre un cadre institutionnel approprié sur le lion dans les Etats si nécessaire.

**Cible 4.3. Au moins 50% des aires protégées et autres réserves de faune de l'aire de répartition du lion sont aménagés efficacement et de façon adaptée d'ici 5 ans.**

Activité 4.3.1. Identifier les aires protégées et réserves de faune de l'aire de répartition du lion.
Activité 4.3.2. S'entendre sur la définition et les critères d'une gestion effective utilisant l'outil de dépistage/suivi de l'efficacité de la gestion du WWF/WB (METT en anglais) comme modèle.
Activité 4.3.3. Evaluer l'existence et l'efficacité de la gestion actuelle des aires identifiées et potentielles.
Activité 4.3.4. Prioriser dans chaque Etat de l'aire de répartition les aires protégées et réserves de faune qui ne sont pas en réalité aménagées.
Activité 4.3.5. Développer des plans de gestion intégrant la faune, ainsi qu'une formation de capacité, un financement durable, le suivi et l'évaluation dans les aires prioritaires.
Activité 4.3.6. Mettre en œuvre les plans d'actions.
Activité 4.3.7. Suivre et évaluer l'efficacité de l'aménagement des aires protégées et réserves de faune définies dans l'aire de répartition du lion.

**Cible 4.4. Les cadres légaux et institutionnels pour une conservation intégrée du lion et associée aux bénéfices socio-économiques sont développés et appliqués sur le plan national par au moins 80 % des pays de l'aire de distribution les 5 prochaines années.**

Activité 4.4.1. Adopter et appliquer des cadres logiques légaux et institutionnels pour une conservation intégrée du lion et les bénéfices socio-économiques associés.

**Objectif 5 (Politiques): S'assurer que les politiques globales reflètent mieux les objectifs et les prévisions des politiques nationales et régionales d'utilisation durable.**
Un élément crucial de la conservation du lion est l'arène politique. L'objectif relatif à la politique vise les résultats suivants :

**Cible 5.1. Les politiques globales, les accords, les conventions et autres instruments relatifs à la conservation du lion, qui ne sont pas en contradiction avec les politiques nationales et régionales des Etats de l'aire de distribution du lion sont encouragées dans les limites de deux cycles de Conférences des Parties de la CITES, la CBD et de la CMS et après.**

Activité 5.1.1. Elaborer des bases de données sur l'effectif des lions dans chaque Etat à mettre à la disposition de tous les décideurs.
Activité 5.1.2. Promouvoir le consensus entre les gouvernements pour la catégorisation du Lion Africain dans les Conventions du CMS et CITES.
Activité 5.1.3. Plaider en faveur du support de classement du lion africain compatible avec les aspirations de cette stratégie de conservation.
Activité 5.1.4. Participer aux CoP de la CITES, la CBD et la CMS pour s'assurer de l'adéquation des décisions avec les aspirations de la Stratégie de Conservation.

**Cible 5.2. Prise en compte de cette stratégie de conservation par les politiques et mesures de par le monde pendant les 10 prochaines années.**

Activité 5.2.1. Distribuer la stratégie de conservation.
Activité 5.2.2. Sécuriser des fonds pour l'organisation d'ateliers, de sessions de débats et de réunions.
Activité 5.2.3. Nommer un facilitateur (UICN) pour les sessions de débats.
Activité 5.2.4. Designer un médiateur (UICN) entre les Etats de l'aire de distribution et ceux hors de l'aire qui ont des politiques contraires à cette stratégie de conservation.
Activité 5.2.5. Maintenir un dialogue continu avec les Etats hors de l'aire de distribution pour avoir leur coopération et leur support financier.

**Objectif 6 (Commerce): Empêcher le commerce illégal des lions et sous-produits des lions en promouvant et sauvegardant un commerce légal durable.**

Le commerce illégal (par exemple pour la médicine traditionnelle) est une des principales menaces potentielles, mais le commerce légal doit être régulé dans le but de conserver des options pour les activités génératrices de revenus relatifs au lion. Les résultats suivants sont définis pour le commerce.

**Cible 6.1. Les législations et régulations existantes sont révisées et si nécessaire amendées et renforcées afin de s'assurer que le commerce des lions et de leurs sous-produits et dérivés est couvert de façon complète dans tous les Etats de l'aire d'ici 5 ans.**

Activité 6.1.1. Former et coordonner des officiers/chargés pour le renforcement des lois (faune, immigration, customs, police) pour identifier les produits du lion.
Activité 6.1.2. Réviser et amender une législation et des politiques pertinentes (y compris prohiber le commerce des os de lions).
Activité 6.1.3. Préparer un guide d'identification des produits du lion.
Activité 6.1.4. Partager l'information avec les autres Etats de l'aire.
Activité 6.1.5. Installer des posters de sensibilisation aux frontières (aux points d'entrée et de sortie).

**Cible 6.2. Les avis valables de commerce/exportation sont non prejudiciables et toutes les exigences de la CITES sont respectées par tous les pays de l'aire de répartitions parties de la CITES d'ici 5 ans.**

Activité 6.2.1. Faire le bilan des données pertinentes sur les prélèvements et le statut des populations.
Activité 6.2.2. Adapter la législation nationale à la CITES.
Activité 6.2.3. Consulter et coordonner aux niveaux national et régional et avec les partenaires commerciaux des avis de commerce non préjudiciables.
Activité 6.2.4. Conduire des formations au niveau régional visant le staff de l'autorité scientifique.

**Cible 6.3. Un consensus régional sur l'utilisation durable des lions est atteint au bout de 5 ans.**

Activité 6.3.1. Sensibiliser les décideurs aux niveaux national et régional sur les utilisations du lion.

Activité 6.3.2. Plaider en faveur d'une intégration, pertinente pour les économies nationales, de l'utilisation de la faune dans les agendas des réunions régionales (ex SADC, EAC, COMESA).
Activité 6.3.3. Collecter et analyser des informations pertinentes sur l'utilisation durable.
Activité 6.3.4. Conduire des formations au niveau régional sur l'utilisation durable du lion.
Activité 6.3.5. Formuler des accords au niveau régional ou bilatéral sur l'utilisation durable des lions.
Activité 6.3.6. Consulter, considérer et se référer à la Convention sur la Biodiversité (CBD) sur les principes et directives pour l'utilisation durable comme guide du suivi de l'utilisation durable et du commerce.

# 6. MISE EN OEUVRE DE LA STRATEGIE

Les principales recommandations pour la mise en oeuvre de la stratégie pour la Conservation du Lion en Afrique de l'Est et du Sud sont les suivantes :
1. Il est demandé aux institutions régionales (SADC, EAC, COMESA, NBI, etc.) d'adopter la stratégie et de supporter sa mise en oeuvre
2. Les Etats de l'aire de répartition en Afrique de l'Est et du Sud doivent travailler, partager leurs expériences et collaborer sur les issues transfrontières
3. Les gouvernements de l'aire de répartition du lion doivent prendre des dispositions et mener des actions pour une mise en œuvre immédiate des objectifs de la stratégie aussi bien au niveau national et régional. Des plans d'action nationaux pour le lion sont recommandés.
4. Les gouvernements de l'aire de répartition, les bailleurs internationaux et les autres acteurs doivent affecter les ressources pour la mise en œuvre de la stratégie.
5. Il est demandé à l'UICN de continuer à supporter l'initiative de cette stratégie à travers le processus de mise en œuvre, aussi bien au niveau régional qu'aux niveaux nationaux.
6. Il est recommandé à tous d'informer et d'encourager tous les acteurs de la conservation du lion à se laisser guider par les stratégies de conservation régionales

Cette stratégie doit conduire à une conservation et une gestion harmonisée du lion au niveau national, donnant aux Etats des objectifs communs à poursuivre, des résultats à viser, et des actions recommandées à entreprendre. Il revient aux institutions en charge de la conservation de la faune dans chaque Etat de l'aire de distribution de faciliter une mise en œuvre cohérente de cette stratégie. Tous les acteurs doivent être impliqués, y compris ceux du secteur privé.

Vu l'urgence de la mise en oeuvre d'actions de conservation du lion, les pays de l'aire de répartition en Afrique de l'Est et du Sud sont encouragés à développer des plans d'actions nationaux à statut opérationnels. Il est demandé aux bureaux régionaux de l'UICN d'appuyer les gouvernements dans la mise en œuvre de la stratégie régionale et des plans d'actions nationaux. Le Groupe de Spécialistes des Felidae de la Commission de Survie des Espèces, UICN et le Groupe de travail sur le Lion d'Afrique doivent fournir un appui technique aux gouvernements, être à l'écoute pour la mise en œuvre et faciliter la collaboration entre les nations aux plans régional et international.

Les populations importantes de lions identifiées à la Figure 3.2. doivent être les aires prioritaires pour la mise en œuvre des recommandations et actions de la stratégie. Plusieurs de ces populations sont transfrontalières et leur gestion nécessite une coopération au niveau international.
Il urge que la Communauté de Conservation fournisse un appui pour la mise en œuvre de la stratégie de conservation du lion d'Afrique de l'Est et du Sud.