

# República de Moçambique



Conservation Strategy and Action Plan for the African Lion (*Panthera I. leo*) in Mozambique



The present document is mainly the result of two previous steps, namely: the survey of the conservation status of lion in Mozambique and the national workshop held in Maputo on the 16<sup>th</sup> and 17<sup>th</sup> of July 2009. Financial support for the realization of both steps was kindly provided by the Safari Club International Foundation and technical support by the IGF Foundation and the Niassa Carnivore Project. The second step (i.e. the national workshop) also received the essential support of the IUCN/SSC Cat Specialist Group.

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Front Cover: Lion in Niassa National Reserve, © Colleen Begg



Acronyms
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ALWG	African Lion Working Group
AMD	African Mammals Databank
AMOS	Hunting Safari Operators Association of Mozambique
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
CoPs	Conference of the Parties
CSG	Cat Specialist Group (IUCN SSC)
CWG	Carnivore Working Group
DNAC	National Directorate of Conservation Areas
DNTF	National Directorate of Land and Forestry
FIV	Feline Immunodeficiency Virus
GOM	Government of Mozambique
IGF Foundation	International Foundation for the Conservation of Wildlife
IUCN	International Union for the Conservation of Nature
IUCN SSC	International Union for the Conservation of Nature, Species
	Survival Commission
LCU	Lion Conservation Unit
MEC	Ministry of Education and Culture
MICOA	Ministry for the Coordination of the Environmental Action
MINAG	Ministry of Agriculture
MITUR	Ministry of Tourism
MOMS	Management Oriented Monitoring System
MPD	Ministry of Development and Planning
NCP	Niassa Carnivore Project
NGO	Non Governmental Organisation
NWLC	National Workshop on Lion Conservation  Protected Areas
PAS	
PAC	Problem Animal Control Safari Club International Foundation
SCIF	
TFCA	Transfrontier Conservation Area
UEM	University Eduardo Mondlane
WWF Mozambique	World Wide Fund for Nature, Mozambique



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## INTRODUCTION

1

The lion *Panthera leo* is an icon of African wildlife, and an important indicator of wilderness quality and integrity where it occurs. It is also a key species for tourism, research and trophy hunting. The species is, nevertheless, increasingly threatened within most of its range. Recent surveys indicate a suspected decline of 30-50% of the African lion population, with current estimates ranging from 23,000 to 39,000 animals. The lion has been extirpated from at least 30% of its historical range in Eastern and Southern Africa with current known lion range estimated at 1.7 million km² (IUCN SSS Cat Specialist Group, 2006).

The International Union for the Conservation of Nature (IUCN) together with other key stakeholders organized two sub-regional workshops on the conservation of the African lion. The first workshop brought 14 West and Central African lion range states to a meeting in Douala, Cameroon in October 2005. The second brought together 15 lion range states from Eastern and Southern African in a workshop that took place in Johannesburg, South Africa in early January 2006 (IUCN, 2006). Participants at each workshop included heads of wildlife conservation agencies and their technical advisors, safari operators, community leaders, nongovernmental organisations involved in conservation, as well as researchers on the African lion.

The workshops came up with a number of recommendations, which included:

- The need for African lion Range States to develop and implement national lion conservation and management plans;
- The need for a Pan African conservation strategy to form the basis of a region wide collaboration in the conservation of the lion and which would also form the basis for the management of other wildlife species on a regional scale.

In the spirit of following up the first recommendation, southern African countries, together with IUCN and support from the Safari Club International Foundation (SCIF), have developed or are now in the process of developing national lion conservation strategies and action plans for the African lion in their respective countries. It is intended that these strategies will motivate for increased lion conservation activity both nationally and regionally.

Development of the Mozambican lion conservation strategy and action plan commenced with a national survey on the conservation status of the lion in the country. This first step was considered as essential since the previous information on the species at national level was very weak. This survey was financed by SCIF and carried out, between 2008 and 2009, by the IGF Foundation in collaboration with the National Directorate of Conservation Areas (DNAC,



Ministry of Tourism) and the National Directorate of Land and Forestry (DNTF, Ministry of Agriculture). As a result of this survey a detailed report was produced (Chardonnet et al, 2009) and georeferenced databases were set up to collect and analyze information on lion sightings and human lion conflict.

The following step was the realization of a National Workshop on Lion Conservation Workshop (NWLC) held in Maputo on the 16<sup>th</sup> and 17<sup>th</sup> of July 2009. The NLCW was attended by Government representatives, including the Ministry of Tourism (MITUR), Ministry of Agriculture (MINAG), Ministry of Environment (MCOA), PAs technicians, representatives of the IGF Foundation, conservation NGOs, the private sector, including the Hunting Operators Association of Mozambique (AMOS) and others resource persons. The workshop was facilitated by a specialist of the IUCN SSC Cat Specialist Group.

The final step has been the preparation of the present document by an editorial team identified and nominated during the national workshop.

This Conservation Strategy is based on the shared **Vision**, adopted by the participants during the NLCW, which is:

Present and future generations of people and lions mutually benefit from a sustainable managed environment in Mozambique

The Goal of this Strategy is:

To secure, and where possible, restore viable lion populations in Mozambique, recognizing their potential to provide substantial social, cultural, ecological and economic benefits for people, while minimizing conflicts

To achieve the Goal, the strategy sets out the following six (6) Strategic Objectives:

- Management To ensure effective conservation management of lions, their habitats and wild prey
- **Mitigation** To minimize, where possible, human-lion related conflicts
- **Socio-economics** To increase the benefits and minimize the costs of long-term lion management amongst all the stakeholders
- **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
- **Politics** To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices
- **Trade** To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade



# **BACKGROUND INFORMATION**

2

#### 2.1 Essential facts on the African Lion

Based on genetic analysis (O'Brien et al. 1987, Dubach et al. 2005), two subspecies are recognized: African lion *Panthera leo leo* (Linnaeus, 1758) and the Asiatic lion *Panthera leo persica* (Meyer, 1826). However, the taxonomic status of the African lion, at subspecies level, is still subject of debate. In their review in Mammalian Species, Haas et al. (2005) recognized six African subspecies, although these were not subject to analysis (Bauer *et al.*, 2009). Based on morphological aspects, seven subspecies (including two extinct) were recognized (one for Asia and six for Africa) by MacDonald (1995). More recently Wilson & Reeder (2005) reported ten subspecies (including extinct ones). The validity of the Asian subspecies is widely accepted, while the African subspecies should probably be grouped into a single race (Nowell & Jackson, 1990). The African lion is, in fact, often considered as monotypic by several authors (e.g. Kingdon, 1997; Skinner & Smithers, 1990).

This species occupies a large variety of habitats, from desert to tropical forest, with all types in between including woodland, dry forest, savannah, steppe, etc. A lion population is found in the equatorial part of Central Africa in the tropical forest itself and in a mosaic of savannah/forest patches. The lion also inhabits arid and semi-desert regions such as the Kalahari Desert and the Namibian coastal desert for example (Bauer *et al.*, 2005).

The lion is a powerful symbol of Africa, but over the past 20 years, numbers are suspected to have dropped dramatically. Across Africa, the lion has disappeared from over 80% of its former range (IUCN, 2006).

According to Chardonnet (2002), East Africa comprises nearly 40% of the lion distribution area on the continent, and Southern Africa more than one third 35%, with the continental range estimated at approximately 3 million km<sup>2</sup>.

According to Nowell & Jackson (1996), lion formerly occurred from northern Africa (Algeria, Egypt, Libya, Morocco and Tunisia) to southern Africa and through south-western Asia, but are now widespread only in Botswana, C.A.R., Ethiopia, Kenya, Tanzania, former Zaire and Zambia. The lion distribution map in the continent is reported in Figure 1. A more updated map for the distribution of lions in Eastern and Southern Africa was produced by experts in the Lion Conservation Strategy for Eastern and Southern Africa prepared in 2006 (Figure 2).

More recently, a population reduction of approximately 30% is suspected over the past two decades (= approximately three lion generations). The causes of this reduction (primarily



indiscriminate killing in defence of life and livestock, coupled with prey base depletion: Bauer 2008), are unlikely to have ceased. This suspected reduction is based on direct observation; appropriate indices of abundance; a decline in area of occupation, extent of occupation and habitat quality; and actual and potential levels of exploitation (Bauer *et al.*, 2009).

Estimating the size of the African Lion population is an ambitious exercise involving many uncertainties. The African lion population is estimated between 16,500 and 30,000 by Bauer & Van de Merwe (2004). A previous estimation provided by Bauer *et al.* (2002) reported a similar estimation, between 18,000 to 27,000 free ranging lions in Africa, while Chardonnet (2002) estimated a larger population of 39,373, with a range of 29,000-47,000.

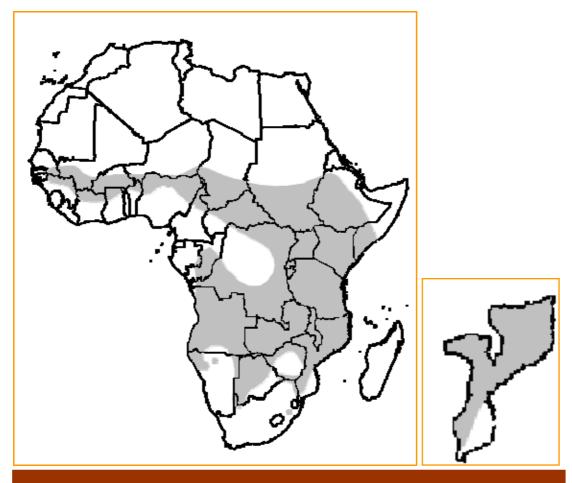
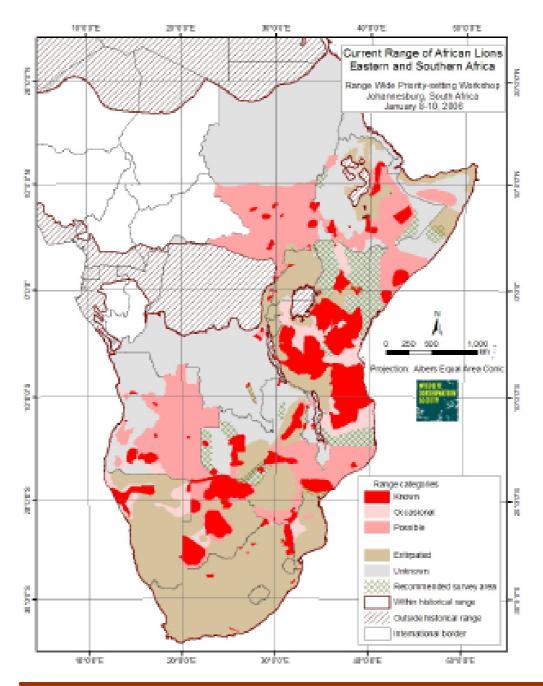


Figure 1. Distribution of lion in Africa, with focus on Mozambique (from Nowell & Jackson, 1996)



**Figure 2.** Distribution of lion in East and Southern Africa (from the *Lion Conservation Strategy for Eastern and Southern Africa*, 2006)

The African lion is presently classified as Vulnerable (VU: criteria A1cd) on the Red List of Threatened Species of the IUCN and listed, as all other Felidae species<sup>1</sup>. However, some authors (Bauer *et al.*, 2002) have suggested that the species should be classified as Endangered (EN: criteria A1b). The species is in the CITES Appendix II.

<sup>&</sup>lt;sup>1</sup> Apart from species listed in Appendix I



Conservation Strategy and Action Plan for the African Lion (Panthera leo) in Mozambique

#### 2.2 Context

According to the definition reported in the Law n. 10/99 (*Lei de Florestas e Fauna Bravia*), the protected areas (Pas) system in Mozambique comprises national parks, national reserves and official hunting areas or Coutadas. In particular the protected areas' asset of the country is composed by six national parks, six national reserves and twelve Coutadas widely sparse and covering about 20% of the national territory (Figure 3). Two further categories with a certain degree of protection are the Game Farms (*Fazenda de Bravio*) and the Community Programmes in Tete and Niassa Provinces (Tchuma Tchato e Chipange Chetu), where lions also occur.

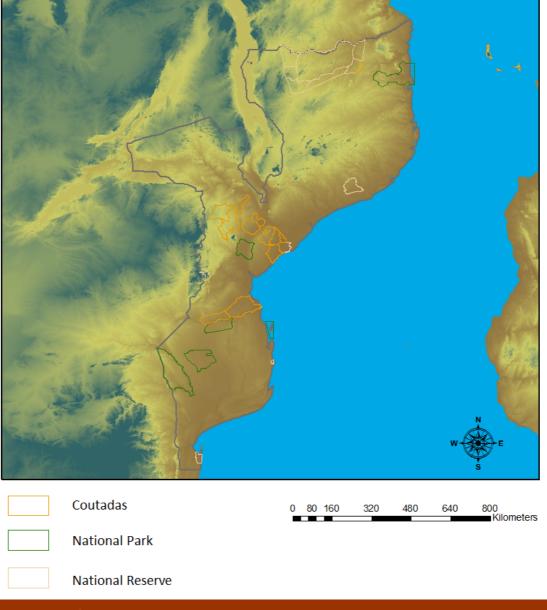


Figure 3. Location of Protected Areas in Mozambique



Although protected by the same law (10/99), lions, with wild dogs, are amongst the most threatened of the large carnivores in Mozambique<sup>2</sup>. Once widespread in the country (Smithers & Tello, 1976), lions are nowadays mostly confined mainly to PAs, in particular within Limpopo, Banhine, Zinave, Gorongosa and Quirimbas National Parks, Marromeu, Niassa and Gilé National Reserves. Outside PAs, the species mainly occurs in the north of the country (Niassa and Cabo Delgado Provinces) and in Tete Province. However, occurrence of lion and lion/human conflicts are also reported for other provinces. It is estimated that around 2,700 lions still occur in Mozambique (Chardonnet *et al.*, 2009).

Likely reasons for the reduction in lion distribution and number in the country are declining prey numbers and continuing conflict with livestock-rearing pastoralists. Such conflict should also be placed in the context of land use, especially at local level in the northern provinces of Mozambique.

During the '60 and '70, Portuguese authorities carried out several campaigns of wildlife culling in order to free areas from the tsetse fly for cattle husbandry (Dias, 1971). During these campaigns all type of animals were killed, including antelopes and wild pigs (main prey of lions) and also carnivores, including lions and leopards. Furthermore, during the long period of war (colonial war until 1975 and civil war until 1992) many herbivores population were severely depleted to feed troops. The final effects of these are not measurable, but are certain to have a strong negative impact on both prey and lion populations.

Human/Lion conflict, which includes livestock predation as well as lion attacks on people and the associated retaliatory killing of lions in response has been another important cause of decline in lion populations and it is still very relevant, especially in the Northern provinces of Cabo Delgado and Niassa and in Tete Province.

The human population in Mozambique is 20,530,714 (INE, National Population Census 2007, available @ <a href="http://www.ine.gov.mz/censo2007/censo2007/rp/evp">http://www.ine.gov.mz/censo2007/censo2007/rp/evp</a>, accessed the 20<sup>th</sup> of September 2009), and it has shown an average annual growth rate of 2.8% during the period 1997-2007. In Niassa and Tete provinces especially, where human/lion conflict is a relevant concern, the population grow rate was 4.6% and 4.9% respectively (Figure 4). It is clear so that without urgent and efficient conservation measures, the conflict is likely to increase in future.

<sup>&</sup>lt;sup>2</sup> The conservation status of Cheetah in Mozambique is presently unknown



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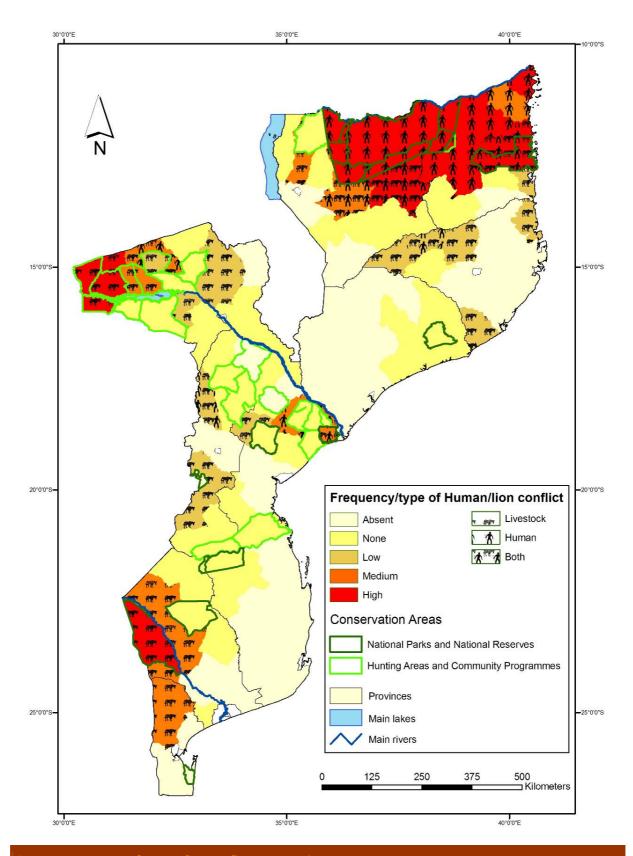


Figure 4. Occurrence of Human/lion conflict in Mozambique



#### 2.3 Status and Distribution of the African Lion in Mozambique

Until recently, the only available information on lion for Mozambique was scarce and mainly from reports and articles dated back to the late 19<sup>th</sup> century and early 20<sup>th</sup> century. The more reliable information on the distribution of lion in Mozambique was the one from Smithers & Tello (1976), who reported that the species was widespread in the country, apart from the southern east sector, south of the Maputo Bay.

Some information was available from PAs' staff, but was not scientifically reliable. The only area with a good degree of knowledge of the species in Mozambique is, in fact, the National Reserve of Niassa, where, since 2003, the Niassa Carnivore Project (NCP) has been monitoring, amongst other carnivores, the lion population, which is estimated between 800 and 1,000 (NCP, available @ <a href="http://www.predatorconservation.com/niassa.htm">http://www.predatorconservation.com/niassa.htm</a>, accessed the 20<sup>th</sup> of September 2009).

To try to fill this gap, a national assessment of the status of lion was conducted by the IGF Foundation between 2008 and 2009, with funds from the SCIF. The final report was validated by the National Directorate of Conservation Areas (DNAC) and the National Directorate of Land and Forestry (DNTF).

According to the findings of the survey (Chardonnet *et al.*, 2009), the lion population in Mozambique has been estimated at 2,700. The lion range is still wide, ranging between 510,000 and 610,000 km² (i.e. 66% and 78% of the country respectively). The species appears unevenly distributed. The survey suggests that while more lion range (71%) lies in nongazetted areas, the majority of lion observations come from PAs and Community Programmes, namely Tchuma Tchato (Tete Province) and Chipange Chetu (Niassa Province), as reported in Figure 5.

During the Eastern and Southern African Lion Conservation Workshop (Johannesburg, 8<sup>th</sup>-13<sup>th</sup> of January 2006) participants, through a Range Wide Priority Setting Exercise, identified ecological units of importance for lion conservation (Lion Conservation Unit or LCU). This exercise refined the subpopulations formerly proposed by Chardonnet (2002) and identified 6 LCUs in Mozambique (IUCN SSC Cat Specialist Group, 2006; Map D, Appendix I):

- LCU 25 Niassa National Reserve
- LCU 26 Surrounding of the Niassa National Reserve
- LCU 42 Gilé National Reserve and surroundings
- LCU 35 South western of Tete Province
- LCU 43 Gorongosa National Park and the Marromeu Complex
- LCU 49 Limpopo National Park and surroundings



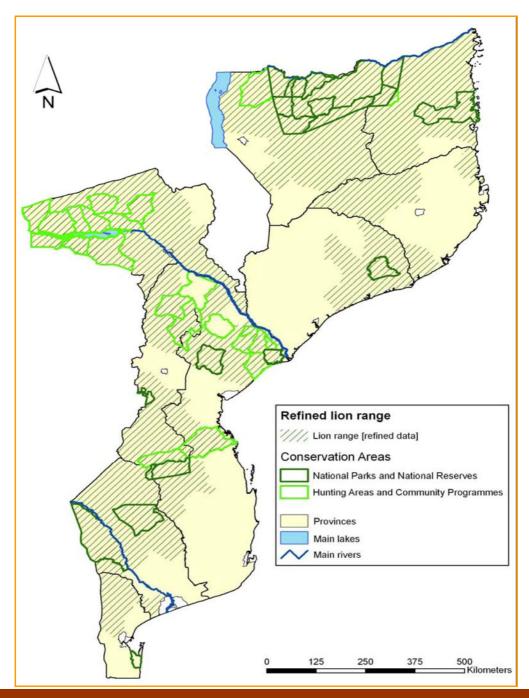


Figure 5. Lion range in Mozambique (Source: Chardonnet et al., 2009)

Based on more detailed information, the recent national lion status survey has refined these LCUs further and shown that three wider LCUs would better include the existing lion populations in Mozambique. Hence, according to Chardonnet (Chardonnet, et al., 2009) the following LCUs should be considered:

 LCU 25/26/42: most of Niassa Province including Niassa National Reserve, Quirimbas National Park, surrounding areas and most of Cabo Delgado Province as well as Gilé National Reserve and surroundings;



- LCU 35/43: most of Tete Province, Gorongosa National Park, Marromeu National Reserve, the surrounding network of *Coutadas* and surroundings;
- **LCU 49**: Limpopo National Park, Banhine National Park, Zinave National Park and western Gaza Province.

Moreover, two categories of connection were considered:

- Connections beyond borders: All the national LCUs proposed appear to be transfrontier LCUs. Informants from Mozambique and bordering countries helped localize the main corridors used by transfrontier lion populations to cross Mozambican borders:
  - South Africa: with the gradual removal of the border fence, some lions move from Kruger National Park in South Africa to Limpopo National Park in Mozambique;
  - o Zimbabwe: a group of lions is known to move between Gairezi Wildlife Management Area and Nyangui State Forest in Zimbabwe and Manica Province in Mozambique; lions also move between Gonarezhou National Park in Zimbabwe and Gaza Province in Mozambique;
  - o Zambia: lion movements occur all along the Zambia border with Tete Province in Mozambique
  - o Malawi: lions move between Namizimu Forest Reserve and Mangochi Forest Reserve in Malawi and Niassa Province in Mozambique
  - o Tanzania: in the region of the Selous-Niassa Wildlife Corridor lions are crossing the Ruvuma River. Lion movements across the border also occur eastwards nearby Negomano bridge and westwards;
- Connections within Mozambique: We considered that regional LCUs 25, 26 and 42 are connected, as well as regional LCUs 35 and 43 (Figure 6). However, whether and to which extent the three recognised national LCUs (25/26/42, 35/43 and 49) are interconnected still has to be investigated.

These LCUs are likely to represent the reality on the ground in Mozambique as they are based on actual survey data. They highlight the clear need to have strong transfrontier coordination amongst various stakeholders in the management of lion, including the private and the local communities.



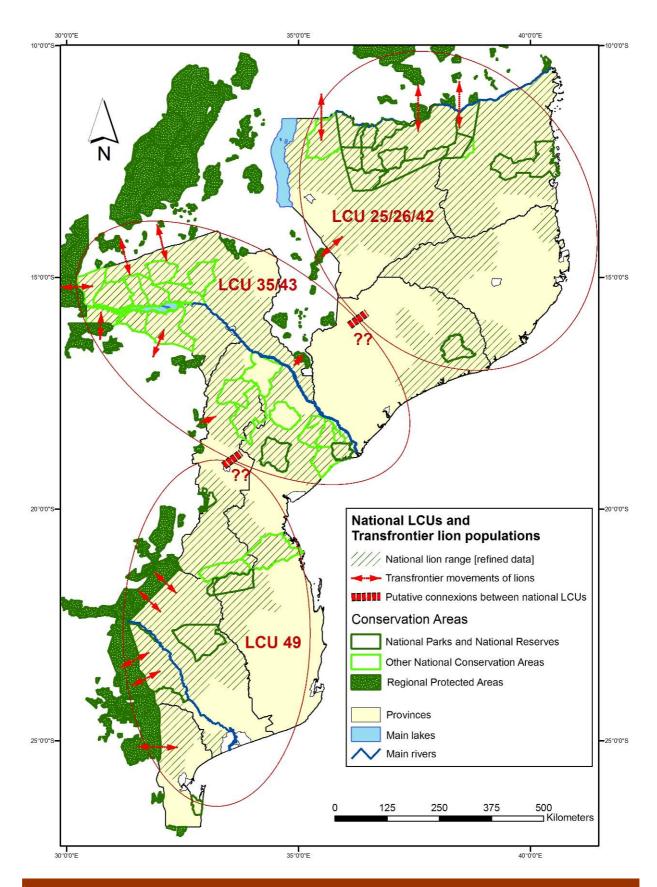


Figure 6. Proposed LCUs in Mozambique (Source: Chardonnet et al., 2009)



# THE PROCESS OF PREPARATION OF THE STRATEGY AND ACTION PLAN

3

Mozambican authorities, together with local stakeholders, took part in the regional exercise for establishing the regional strategy and recognised the importance of establishing a national action plan. Mozambican authorities expressed the will to embark on a lion action plan exercise in Mozambique. They envisaged conducting this exercise by holding a national workshop using the most recent participative approaches in planning conservation (IUCN/Species Survival Commission, 2008).

By doing so, they realized the lack of comprehensive information for reviewing the lion profile in Mozambique. In order to provide more comprehensive data on the species, the Government of Mozambique, with the financial support of the Safari Club International Foundation (SCIF) and the technical support of the IGF Foundation and the Niassa Carnivore Project, carried out a conservation status survey of the lion between 2007 and 2009. This study provided the national workshop with comprehensive material on the lion status within the country. This survey was conducted in three phases:

#### • Phase 1: Preliminary survey

Phase 1 gathered data available on the lion conservation status in Mozambique (data acquisition between May and July 2008; data analysis and report writing between August and September 2008). This phase produced a general picture of the former knowledge on the lion conservation status in the country (*Chardonnet et al.,* 2008b). By doing so, the preliminary phase identified the gaps in knowledge and paved the way to carry out the next two phases.

#### • Phase 2: Filling the gaps in knowledge

Phase 2 investigated the gaps in knowledge formerly identified by Phase 1. New data acquisition was carried out through complementary field inquiries between November 2008 and January 2009.

#### • Phase 3: Status review

Phase 3 analyzed all the information collected by Phases 1 & 2 and led to the production of the current comprehensive evaluation of the conservation status of the lion in Mozambique (between January and February 2009). The draft document was commented on and suggestions provided by several technicians of GOM and other entities, and finally approved by DNAC and DNTF. The final document (2009) represented the most valuable contribution to



the national workshop for establishing the present Strategy and Action Plan for lion conservation in Mozambique and the invaluable base for the workshop's discussions.

Following the approval the GOM (DNAC and DNTF) organised the NWCL, which was also kindly financially supported by the SCIF. The NWCL was held in Maputo on the 16<sup>th</sup> and 17<sup>th</sup> of July 2009.

The NWCL was organised in order to have the larger possible representation of the relevant stakeholders other than the governmental institutions. In particular the NWCL included with the presence of the representatives of the hunting industry (AMOS and others), the private sector involved in the management of PAs, NGOs (IUCN Mozambique and African Wildlife Foundation), lion researchers and experts both at national and international level.

The process also received the essential support of Dr. Christine Breitenmosser (IUCN/SSC CSG) who kindly acted as facilitator, and provided important documents to guide the organization and the proceeding of the NCWL.

The workshop was initiated with several presentations on aspects of lion conservation in Mozambique and the region. The participants commented on and discussed the results of the national survey on the conservation of lion.

During the workshop, the participants defined the vision and goal of the present strategy and action plan as a group and were then asked to work in five separate groups on the following aspects: Management (Group 1), Mitigation and Policy (Group 2), Socio-economics (Group 3), Policy and Land Use (Group 4) and Trade (Group 5).

Each of the working groups discussed and determined a series of targets and activities, as well as the timelines and responsibilities for each aspect of lion conservation. These were then presented and reviewed by the wider workshop participants and form the basis of the Strategy and Action plan for the Conservation of Lion in Mozambique for a period of 5 years (2010-2015) that is presented here.



# THREATS, GAPS AND CONSTRAINTS

4

Both during the lion conservation survey and the NWLC, several conservation threats, gaps and constraints were identified, mainly related to the following topics: Management, Politics, Conflicts and Mitigation, Socio-economics, Policy and Land Use and Trade. The analysis of these issues and the proposed solution by the workshop's participants has ultimately brought to the definition of the National Strategy and Action Plan for the conservation of lion in Mozambique.

#### 4.1 Management

In this section are reported all the constraints and threats individuated by the participants and related to the management of lions, including aspects linked to the research needs:

- Effective lion, habitat and prey management is suffering from a lack of resources and carefully articulated research and monitoring needs;
- Lack of information and control of indiscriminate/unselective snaring by poachers for subsistence;
- Lack of information and control of illegal hunting for money and trophies;
- Lack of monitoring of trophies and under aged killing in sport hunting;
- Unknown levels of retaliatory killing (especially in the south of Mozambique);
- Unregulated reintroductions;
- No areas appear to have been identified for lion re-introductions;
- Diseases of importance in the context of lion conservation include Foot & Mouth Disease (FMD) & Feline Immunodeficiency Virus (FIV). Research into causes, transmission modes and dynamics of both appear lacking in Mozambique.
- Lack of coordination on the flow of information from peripheral areas to national authorities;
- Lack of informal collaboration between range countries (transfrontier collaboration);
- Difficulties in establishing ecotourism initiatives in remote areas and therefore difficulties in providing economics benefits for local communities.
- Generally information and knowledge on numbers, distribution, range, ecology and biology of lions, including population dynamics is still far from completed;
- Lion research has been focused mainly in the Niassa National Reserve (Niassa Carnivore Project) and recently a programme of lion monitoring is being implementing in the Gorongosa National Park;
- Lack of regular monitoring on lion status and threats;
- Lack of understanding of cultural and anthropological matters related to lion;
- Lack of involvement of national researchers and institutions;



Lack of funding to fill up the knowledge gap.

#### 4.2 Politics

The followings are the issues and concerns identified in relation to the Policy aspects, including the Human/lion conflict:

- While legally protected, current policy for lions is effectively protected only within PAs and;
- Weak law enforcement in case of violations in the use of natural resources;
- Ambiguity in the interpretation of the law;
- Weak implementation of the principles of wildlife conservation (e.g. existence of people and domestic dogs inside PAs);
- Low level of appreciation of wildlife resources;
- Weak monitoring and patrolling for natural resources' conservation;
- Lack of vertical integration and coordination within Governmental institution ,both at central and local level;
- Lack of adoption of regional strategies for mitigation/resolution of Human/lion conflict;
- Lack of appropriate protocols for responding to the Human/lion problem;
- Indiscriminate killing of lion for PAC;
- Lack of "rapid response" teams;
- Lack of an appropriate M&E system;
- Lack of human resources, financial and material resources to intervene in human wildlife conflict (Trained personnel, weapons, vehicles, etc.);
- The process of data collection and analysis requires improvement;
- Delay in reporting of incidents;
- Delays in the process of decision making in cases of conflict by the authorities
- Inappropriate people's behaviours (e.g. sleep in open places, walking at night, etc.);
- Inappropriate practices in the construction of corrals (or absolute absence) for domestic animals;
- Lack of appropriate infrastructure in the villages.

#### 4.3 Socio-economics

The followings are the issues and concerns identified in relation to the Socio-economics aspects, including also some economic aspects related to the Human/lion conflict:

- Human/lion conflicts (loss of human lives, loss of livestock, lost of incomes for local communities, competition for source of protein) are not being adequately addressed;
- Increase in livestock production;
- Poor agricultural practices and expansion of agriculture;
- Lack of involvement of local communities;



- Lack of awareness for local communities;
- Lack of incentives for lion conservation;
- High poverty levels in rural areas (lack of employment and income generating opportunities);
- Lack of recognition of the conservation value and importance of lion;
- Lack of mechanisms of cost/benefit sharing;
- Wildlife-related net benefits are not always or easily equitably distributed to affected households and communities;
- There is a general shortage of both human and financial resources for the management of wildlife, including the lion;
- Capacity strengthening and training is insufficient leading to de-motivated staff;
- Resource allocations are poorly allocated.

#### 4.4 Policy and Land Use

The followings are the issues and concerns identified in relation to the Policy and Land Use aspects:

- Competing land use;
- Inappropriate land use and lost of habitat;
- Fragmentation of laws and no inter-sector and intra-sector cohesion and harmonization;
- Policies are not translated quickly and adequately into laws and regulations;
- Wrong interpretation of the legislation framework (including laws not translated into local languages);
- Lack of appropriate knowledge and awareness of the existing legal framework;
- Lack of collaboration between different law enforcement bodies;
- Not all laws are fully translated into adequate regulations;
- Lack of appropriate land use planning and zoning at various level;
- Lack of appropriate alternative agriculture methods (e.g. conservation agriculture);
- Local communities are often not aware of the full economic value of natural resources:
- Lack of scenario planning with local communities;
- Law and regulations are not implemented properly and/or are not implementable;
- Lack of resources (human and financial) at all level;
- Lack of appropriate by-law for wildlife management at community level;
- Existing Land use plans are not often implemented because not done with local participation (often no different alternative are proposed to local communities);
- Lack of collaboration, communication and coordination within and between different agencies;
- Inappropriate delivery mechanisms for Multilateral Environmental Agreements.



#### 4.5 Trade

- Monitoring the analysis of trophy quality would improve understanding of biological sustainability and lion population dynamics
- Possible moving of the species to Appendix 1 (Embargo of trophy export by importing countries (e.g. USA and Europe Union in case of lion be upgraded to Appendix 1);
- Concern about the trade in live lions;
- Concern about the increasing trade in lion body parts;
- Trade of trophies;
- Hunting quota in most cases are issued without any scientific basis;
- Hunting permits are often issued to kill problem lions without any control of the hunting trophy and when and how the hunting occur;
- Increase of the number of hunting areas;
- Sport hunting is done in most concessions area without reliable information on the status of the lion;
- The annual quota for the country seams to be very high (50 animals in 2007, 111 in 2008 and 60 in 2009);
- Consequently, enhanced and more mutually beneficial sustainable use through regulated hunting is not being realised because of unclear policy and inconsistent management objectives.



# STRATEGY AND ACTION PLAN FOR THE CONSERVATION OF LION IN MOZAMBIQUE

Based on the information on the status of lions in the region and a national survey of the conservation status of the species in Mozambique and through analysis of the above set of issues, and a participatory meeting, the Government of Mozambique, has formulated an action plan and conservation strategy for lions in the country, together with an accompanying set of activities. Targets are established at the Goal and Output levels.

#### 5.1 Vision (Long term objective)

The following is the Vision agreed by the participants to the NWCL:

Present and future generations of people and lions mutually benefit from a sustainable managed environment in Mozambique

#### 5.2 Goal (Immediate objective or purpose)

The following is the Goal agreed by the participants to the NWCL:

To secure, and where possible, restore viable lion populations in Mozambique, recognizing their potential to provide substantial social, cultural, ecological and economic benefits for people, while minimizing conflicts

#### 5.3 Objectives, Targets and Activities

A total of six (6) management and conservation objectives were identified related to the following aspects: Management, Mitigation, Socio-economics, Policy and Land Use, Politics and Trade. The participants also set a total of twenty two (22) specific targets and seventy eight (78) activities to be carried out in order to achieve the agreed objectives.



<u>Objective 1</u> (Management): To ensure effective conservation management of lions, their habitats and wild prey

<u>Target 1.1:</u> Monitoring and survey programs for effective and adaptive lion conservation established throughout lion range within 3 years

Activity 1.1.1: Develop new and standardize existing monitoring and surveys programs

Actors: CWG

**Indicators:** Monitoring program in place

**<u>Time line:</u>** 5 months (August-December 2010)

Activity 1.1.2: Identify, procure and acquire appropriate equipment

Actors: CWG and other Experts Indicators: Equipment available

**Time line:** 5 months (August-December 2010)

<u>Activity 1.1.3:</u> Identify and prioritize key areas for data collection, ecological data, trade data, socio-economic data, etc.

Actors: CWG within DNAC and DNTF (and then from the new Protected Areas

Management Agency)

**Indicators:** Report

**Time line:** 5 months (August-December 2010)

Activity 1.1.4: Train personnel in data capture, management and analysis

**Actors:** Experts

Indicators: Personnel trained and in placeTime line: 5 months (August-December 2010)

Activity 1.1.5: Carry out national lion survey in gap areas identifies by the document "Conservation Status of the Lion in Mozambique"

Actors: Team led by experts in the beginning (students involvement), later by

local capacity

**Indicators:** Report

Time line: 14 months (May-November 2011, May-November 2012)



<u>Activity 1.1.6:</u> Develop and maintain harmonised databases at local, national and regional levels and the linkage between them

Actors: Experts from DNAC and DNTF (and then from the new Protected Areas

Management Agency)

Indicators: Database in place and working
Timeline: 24 months (June 2010-May 2012)

Activity 1.1.7: Disseminate information as appropriate to all stakeholders

<u>Actors:</u> Experts from DNAC and DNTF (and them from the new Protected Areas

Management Agency)

**Indicators:** Regular reports

Timeline: 10 months (June 2010-March 2011)

<u>Target 1.2:</u> Targeted research on ecology, management and mitigation of conflict initiated in representative priority areas within 3 years

Activity 1.2.1: Identify and prioritise biological and socio-ecological research needs and

areas

Actors: Experts from DNAC and DNTF (and them from the new Protected Areas

Management Agency) and universities

**Indicators:** Reports

<u>Timeline:</u> 7 months (August 2010-February 2011)

**Activity 1.2.2:** Initiate collaborative research and partnerships

**Actors:** Researchers

**Indicators:** MoU developed and signed

**Timeline:** 7 months (August 2010-February 2011)

Activity 1.2.3: Initiate and carry out research projects in identified areas

**Actors:** Universities and researchers

Indicators: Reports
Timeline: Start in 2011



#### Activity 1.2.4: Disseminate results of research

**Actors:** Authors, researchers

**Indicators:** Publications, workshops and presentations

Timeline: Start in 2011

<u>Target 1.3:</u> Capacity buildings programmes for lion conservation, where possible in tandem with research and monitoring established in 90% of the extent lion range within 5 years

Activity 1.3.1: Identify national and local training needs

**Actors:** CWG groups invited by Mozambican conservation authorities

**Indicators:** Reports on training needs

**Timeline:** 18 months (September 2010-February 2012)

Activity 1.3.2: Identify and procure and acquire appropriate equipment and funding

Actors: Working groups invited by Mozambican conservation authorities

**Indicators:** Reports with list of funding and equipment available

<u>Timeline:</u> 18 months (September 2010-February 2012)

Activity 1.3.3: Identify existing centres for training and provide necessary support

**Actors:** Working groups invited by Mozambican conservation authorities

Indicators:Reports on training centres and support providedTimeline:18 months (September 2010-February 2012)

<u>Objective 2</u> (Mitigation): To minimize, where possible, the human-lion related conflicts

<u>Target 2.1:</u> Database on human/lion conflict and problem animal control established in each district affected within 3 years

**Activity 2.1.1:** Develop human/lion conflict databases in all lion districts



<u>Actors:</u> Database experts, District Government, community leader

**Indicators:** Access database developed

<u>Timeline:</u> 6 months (July2010-December 2010)

Activity 2.1.2: Participatory planning on how to mitigate lion attacks on humans in at least 3 known local communities by using experience from other countries

**Actors:** Local government, community leaders

**Indicators:** At least three meetings held with the community

Timeline: 3 months (August 2010-October 2010)

<u>Target 2.2:</u> Incidents of human/lion conflict reduced at least 30% within 5 years while also reducing retaliatory killing

<u>Activity 2.2.1:</u> Develop and implement country specific awareness and education package on lion conservation and management involving areas with high incidence

Actors: MEC, MINAG, MITUR and MICOA, NGOs

<u>Indicators:</u> Package on lion issue included in the educational curriculum

<u>Timeline:</u> 12 months (August 2010 – July 2011); implementation during the 5 years

<u>Activity 2.2.2:</u> Develop mechanisms with the livestock sector to reduce livestock predation by lions

Actors: MINAG, MITUR, MEC, media

<u>Indicators:</u> 2.500 posters the on the good practices to protect the livestock;

Divulgation of the message through local radios

<u>Timeline:</u> 3 months (September 2010-November 2010)

<u>Target 2.3:</u> Number of lion killed through indiscriminate killing reduced by at least 30% within 5 years after the establishment of the baseline

<u>Activity 2.3.1:</u> Develop and implement country specific awareness and education package on lion conservation and management

Actors: MINAG, MITUR

**Indicators:** Reports on the incidents from the database



Timeline: 60 months (June 2010-May 2014)

Activity 2.3.2: Develop incentives for communities to use legal PAC in three identified

hotspots

Actors: MINAG, MITUR

Indicators: Report on working visits in countries of the Region for exchange of

experience and catalogue with possibilities for incentives

**Timeline:** by November 2010

<u>Target 2.4:</u> Well-equipped unit established in each affected district to conduct rapid response, restrained and precisely targeted PAC within 5 years

<u>Activity 2.4.1:</u> Improve the management capacity for effective PAC Units in lion Districts within 2 years

Actors: MINAG, MITUR

Indicators: monthly reports on law enforcement Timeline: 24 months (June 2010-May 2012)

<u>Activity 2.4.2:</u> Build capacity for effective PAC Units in each lion district in accordance with the needs assessment (dedicated intervention units, not usual rangers)

**Actors:** MINAG, MITUR, District authorities

<u>Indicators:</u> training performed and dedicated intervention units in place

Timeline: 12 months (June 2010-May 2011)

<u>Target 2.5:</u> Minimize incidences of unprovoked lion attacks within 5 years (improve the existing baseline information first)

<u>Activity 2.5.1:</u> Develop and implement collaborative and effective PAC techniques and protocols including mitigation methods respecting existing guidelines, e.g. African Lion Working Group

Actors: MINAG, MITUR

<u>Indicators:</u> Collaborative and effective PAC techniques and protocols in place

Timeline: 12 months (June 2010-May 2011)



<u>Objective 3</u> (Socio-economics): To increase the benefits and minimise the costs of long-term lion management amongst all the stakeholders

<u>Target 3.1:</u> Inventory of stakeholders directly affected by lion conservation completed within 2 years

<u>Activity 3.1.1:</u> Identify stakeholder groups (e.g. local communities, hunting groups, tourism groups) at the appropriate scale

Actors: CWG, MINAG, MITUR, MICOA, NGOs

Indicators: Check list of stakeholders identified, reports
Timeline: 3 months (July 2010-September 2010)

Activity 3.1.2: Indentify impacts of lion conservation on each stakeholder group

Actors: CWG, MITUR, MINAG, MICOA, UEM

**Indicators:** Reports on both negative and positive impacts

**Timeline:** 6 months (July 2010-December 2010)

**Activity 3.1.3:** Determine extent/magnitude of impacts

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs

**Indicators:** Assessment reports on the magnitude of impacts

Timeline: 12 months (July 2010-June 2011)

Activity 3.1.4: Prioritize groups for intervention based on extent/magnitude of

impacts

Actors: CWG, MITUR, MINAG, MICOA, UEM

**Indicators:** Prioritization report

Timeline: 12 months (July 2010-June 2011)

<u>Target 3.2:</u> Appropriate training and capacity building delivered to prioritised stakeholders in at least 50 gender-and-age representative groups to assist them to manage lion conservation more effectively within 5 years



Activity 3.2.1: Identify 50 representative stakeholders groups

Actors: CWG, MITUR, MINAG, MICOA, NGOs

**Indicators:** Checklist and reports

**Timeline:** 6 months (September 2011 – March 2012)

Activity 3.2.2: Identify training needs in consultation with identified stakeholders

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs

Indicators: Training needs assessment reports

Timeline: 6 months (January 2011 – June 2011)

**<u>Activity 3.2.3:</u>** Develop training materials and implement training programs

Actors: CWG, MITUR, MINAG, MICOA, UEM

<u>Indicators:</u> Training material produced and distributed to stakeholder groups:

Training programs reports

**Timeline:** 36 months (September 2011-August 2014)

<u>Activity 3.2.4:</u> Review effectiveness of training material and program in consultation with identified stakeholders

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs

Indicators: Monitoring & Evaluation reports

Timeline: 36 months (July 2012-August 2015)

**Activity 3.2.5:** Implement adaptive program across lion range

Actors: CWG, MITUR, MINAG, MICOA, UEM Indicators: Adaptive management reports

Timeline: 36 months (July 2012-August 2015)

<u>Target 3.3:</u> Collaboratively develop area-specific lion management plans agreed and implemented with at least 50 identified stakeholders groups within 5 years

**Activity 3.3.1:** Consult identified stakeholders

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs



Indicators: Report on stakeholder consultation
Timeline: 60 months (July 2010-May 2015)

Activity 3.3.2: Determine the scope and scale of the key activities of the management

plan

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs

**Indicators:** Management plan developed with stakeholder consensus

Timeline: 60 months (July 2010-May 2015)

# <u>Activity 3.3.3:</u> 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;
- Conduct environmental audits every 2 years.

Actors: CWG, MITUR, MINAG, MICOA, UEM, NGOs Indicators: Manual for best practices developed and in use

**Timeline:** 60 months (July 2010-May 2015)

#### **Activity 3.3.4:** Implement the management plan

**Actors:** CWG, MITUR, MINAG, NGOs, identified stakeholders

**Indicators:** Implementation reports

**Timeline:** 48 months (January 2011-December 2015)

#### Activity 3.3.5: Review implementation plan annually and amend where necessary

Actors: CWG, MITUR, MINAG, UEM, NGOs

<u>Indicators:</u> Annually monitored, evaluated and updated implementation plan

**Timeline:** Annually



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

**Activity 3.4.1:** Identify and quantify income generated from lion conservation

Actors: CWG, MITUR, MINAG, MICOA, Ministry of Finance, identified

stakeholders

**Indicators:** Matrix with income from lion conservation

Timeline: 60 months (July 2010-May 2015)

Activity 3.4.2: Distribute generated income according to intensity of lion impact

Actors: MITUR, MINAG, MICOA, Ministry of Finance, identified stakeholders

Indicators: Report on income distribution
Timeline: 60 months (July 2010-May 2015)

<u>Activity 3.4.3:</u> Provide appropriate incentives for people in high-conflict areas to relocate to low-conflict areas

Actors: MITUR, MINAG, MICOA, Ministry of Finance, NGOs, Public health sector,

MPD

**Indicators:** Number of training facilities, health and water facilities and land

availability in safe areas

Timeline: 60 months (July 2010-May 2015)

<u>Activity 3.4.4:</u> Provide appropriate incentives to discourage immigration and human settlement into lion range areas

Actors: MITUR, MINAG, MICOA, Ministry of Finance, NGOs, Public health sector,

MPD

Indicators: Number of training facilities, health and water facilities and land

availability in current living areas

Timeline: 60 months (July 2010-May 2015)

Activity 3.4.5: Allow for the development of Eco Tourism Business ventures

<u>Actors:</u> MITUR, MINAG, MICOA, Ministry of Finance, NGOs, MPD

**Indicators:** Number of tourism business venture in place



<u>Timeline:</u> 5 years (April 2010-March 2016)

<u>Objective 4</u> (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-economics benefits on current and potential lion range

<u>Target 4.1:</u> Within 5 years to have at least one new wildlife-integrated land use plan that secure an existing, or establishes a potentially viable lion population in LCU 25/26/42 and LCU 35/43

Activity 4.1.1: Define more precisely the target area within LCU 25/26/42 and LCU 35/43

Actors: DNTF (leader), DNAC, DNPOT, AMOS, CWG, Province and District

planning authorities

Indicators: Target area within LCU 25/26/42 and LCU 35/43 is defined, agreed and

mapped

**Timeline:** 6 months (July 2010-December 2010)

Activity 4.1.2: Carry out base line surveys in the target area within LCU 25/26/42 and LCU 35/43 (including bio-physical, socio-economic, wildlife, mapping and existing zoning plan)

Actors: DNTF, DNAC, DNPOT (leader), CWG, Provincial Directorates of

Agriculture, Tourism, Environment and Fisheries, AMOS, CDAE at district

level, Local communities, NGOs

**Indicators:** Database and report available

**Timeline:** 16 months (January 2011-April 2012)

<u>Activity 4.1.3:</u> Develop wildlife integrated land-use plans, taking into account the existing plans

Actors: DNTF, DNAC, DNPOT (leader), Provincial Directorates of Agriculture,

Tourism, Environment and Fisheries, AMOS, CDAE at district level, Local

communities, NGOs

**Indicators:** Land use plans' document available

<u>Timeline:</u> 36 months (January 2011-December 2014)



Activity 4.1.4: Submit land-use plans for adoption by relevant authorities

Actors: DNTF, DNAC, DNPOT (leader)

<u>Indicators:</u> Land use plans approved and adopted by relevant authorities and local

communities

Timeline: 42 months (January 2011-May 2015)

Activity 4.1.5: Ensure implementation of the land-use plans

**Actors:** Provincial and district authorities

<u>Indicators:</u> 100% of districts and 60% of sampled households adhere to the plan

<u>Timeline:</u> continuous

**Activity 4.1.6:** Evaluate effectiveness of applied land-use Plans

Actors: DNAC, DNTF, DNTOP, AMOS

<u>Indicators:</u> Lion/Human conflict reduces compare to the baseline

**<u>Timeline:</u>** Continuous during the implementation

<u>Target 4.2:</u> Guidelines for integrate lion conservation and associated socio-economic benefits are developed and included in the relevant legal framework

<u>Activity 4.2.1:</u> Consultation and awareness process for the development of national guidelines to assist harmonization of legislation for wildlife integrated land use, lion conservation and associated socio-economic benefits

Actors: DNTF, DNAC, CITES Management and Scientific Authorities, NGOs (IUCN,

WWF, etc...), AMOS, Civil society

<u>Indicators:</u> Consultation held and consensus reached

Timeline: 10 months (July 2010-April 2011)

<u>Activity 4.2.2:</u> Develop national guidelines, in accordance with the regional strategy, to assist harmonization of legislation for wildlife integrated land use, lion conservation and associated socio-economic benefits

Actors: DNTF, DNAC, CITES Management and Scientific Authorities, IUCN, WWF,

FNP, AMOS

<u>Indicators:</u> Guidelines developed and adopted by relevant stakeholders

<u>Timeline:</u> 10 months (July 2010-April 2011)



**Activity 4.2.3:** Advocate for inclusion in the national legal framework

Actors: DNTF, DNAC

**Indicators:** Guidelines incorporated

Timeline: 12 months (July 2010-May 2011)

<u>Target 4.3:</u> Guidelines for integrating lion conservation and associated socio-economic benefits are developed and included in the relevant legal framework

<u>Activity 4.3.1:</u> Consultation and awareness process for the development of national guidelines to assist harmonization of legislation for wildlife integrated land use, lion conservation and associated socio-economic benefits

Actors: DNTF, DNAC, CITES Management and Scientific Authorities, NGOs (IUCN,

WWF, etc...), AMOS, Civil society

<u>Indicators:</u> Consultation held and consensus reached

Timeline: 10 months (July 2010-April 2011)

<u>Target 4.4:</u> At least 50% of protected and other defined wildlife areas within the lion range are effectively and adeptly managed within 5 years

Activity 4.4.1: Update and monitor protected and defined wildlife areas in lion range

Actors: DNTF (leader), DNAC (leader), AMOS, NGOs, Scientists, Local

communities

**Indicators:** New range maps updated, refined and reviewed regularly

**Timeline:** Regularly every 3 years

**Activity 4.4.2:** Implement the adopted guidelines

Actors: DNTF (leader), DNAC (leader), AMOS, NGOs, Scientists, Local

communities

<u>Indicators:</u> Lion range maintained at least, illegal killing of lion reduced by 25%

**<u>Timeline:</u>** Continuous after the approval

Activity 4.4.3: Adapt the WB/WWF Management Effectiveness Tracking Tool (METT) and MOMS for monitoring the effectiveness of management



Actors: DNAC, DNTF, AMOS, NGOs, Scientists

**Indicators:** New tools developed

**<u>Timeline:</u>** Continuous after the approval, every 12 months

<u>Activity 4.4.4</u> M&E the effectiveness of current management in the identified areas using the adopted tools

Actors: DNAC, DNTF, AMOS, NGOs, Scientists, local communities

**Indicators:** Data collected monthly

**Timeline:** Each year

Target 4.5: Improve coordination, collaboration and communication amongst all stakeholders

**Activity 4.5.1:** Prepare, discuss and approve TORs for a Carnivore Working Group

Actors: DNTF, DNAC, CITES, AMOS, IUCN

**Indicators:** TORs available

<u>Timeline:</u> 4 months (July 2010-October 2010)

Activity 4.5.2: Appoint a Carnivore Working Group (CGW) for Mozambique

Actors: DNTF, DNAC, CITES, AMOS Indicators: Working group appointed

**Timeline:** 6 months (October 2010-March 2011)

<u>Objective 5</u> (Politics): To ensure that global policies better reflect the will and intent of regional and national sustainable use policies and practices

<u>Target 5.1:</u> 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 CoPs cycles of CITES, CBD, and CMS and thereafter

<u>Activity 5.1.1:</u> Make databases on lion numbers in each Province available to all decision makers



Actors: MINAG, MITUR

**Indicators:** One database established in each Province (provincial services of forestry

and wildlife)

<u>Timeline:</u> 6 months (September 2010-February 2011)

**Activity 5.1.2:** Advocate for support for listings of the African lion consistent with the aspirations of this Action Plan

Actors: GOM, CWG and Conservation NGOs

**Indicators:** Established MoU between GOM and NGOs

<u>Timeline:</u> 12 months (July 2010-May 2011)

**Activity 5.1.3:** Attend CITES, CBD and CMS CoPs to ensure decisions are consistent with the aspirations of this Action Plan

Actors: GOM and Conservation NGOs

**Indicators:** 3 Mozambican representatives attending the CITES, CBD and CMS CoPs

<u>Timeline:</u> Continuous

<u>Target 5.2:</u> Accommodation of this Action Plan by worldwide domestic policies and measures promoted during the next 10years

Activity 5.2.1: Distribute this Action Plan

Actors: MINAG, MITUR, CWG

<u>Indicators:</u> 1500 copies distributed among the Governmental representatives, NGOs

and other relevant stakeholders

<u>Timeline:</u> 24 months (August 2010-July 2012)

Activity 5.2.2: Secure funding for the implementation of workshops, dialogue sessions

and meetings

Actors: MINAG, MITUR

**Indicators:** Sector Integrated Project in MITUR and MINAG

<u>Timeline:</u> 24 months (August 2010-July 2012)

<u>Activity 5.2.3:</u> Maintain on-going dialogue with non-Range States to get their cooperation and funding support

Actors: MINAG, MITUR



**Indicators:** Reports of the meetings

**<u>Timeline:</u>** Continuous

<u>Objective 6</u> (Trade): To prevent illegal trade in lions and lion products while promoting and safeguarding sustainable legal trade

<u>Target 6.1:</u> Existing legislation, regulations and policies reviewed, where necessary amended, and enforced, to ensure that all trade in lions, and lion parts and derivatives are comprehensively covered in Mozambique within 5 years

<u>Activity 6.1.1:</u> Train and coordinate law enforcement officers (Wildlife, Immigration, Customs, Police) to identify lion products, and improve knowledge on legislation, regulation and policies

Actors: MICOA

**Indicators:** Number of training sessions and trained staff

Timeline: By 2014

<u>Activity 6.1.2:</u> Review and amend relevant legislation, regulations and policies (including prohibiting trade in lion parts)

Actors: MITUR

**Indicators:** Approved legislation, regulation and policy

Timeline: By 2011

Activity 6.1.3: Share information within the country and other lions Range States

Actors: MITUR, MNAG, MICOA
Indicators: Database on lion use in place

**Timeline:** By mid 2011

<u>Activity 6.1.4:</u> Prepare policy for controlling live lions trade and translocation in and out of the country

Actors: MICOA

<u>Indicators:</u> Policy in place and approved

Timeline: By 2011

**Activity 6.1.5:** Identify relevant institution to coordinate all CITES issues



Actors: MICOA

**Indicators:** Institution appointed

Timeline: By 2010

<u>Target 6.2:</u> Sound non-detriment findings made and CITES requirements fulfilled (where possible) by Mozambique within 5 years

Activity 6.2.1: Collection of relevant data on off take and population status

Actors: MITUR, MINAG, UEM

<u>Indicators:</u> Data base on lion use in place

Timeline: By 2010

<u>Activity 6.2.2:</u> Integrate CITES into Mozambique laws, regulations and lion conservation needs

Actors: MICOA

<u>Indicators:</u> National laws, regulations comply with CITES rules

**Timeline:** By mid 2011

**Activity 6.2.3:** Secure funding to carry out no-detrimental findings

Actors: MITUR, MINAG Indicators: Funds available

Timeline: By 2014

<u>Activity 6.2.4:</u> Conduct training at District, provincial and regional level targeting conservation, administrative and Scientific Authority staff

Actors: MICOA

**Indicators:** Number of training sessions, trained staff

Timeline: By 2014

Activity 6.2.5: Lobby CITES to be sensitive to Mozambique needs (incentives) as lion range country (PAC, H/L)

Actors: MINAG

Indicators: Numbers of meetings and continued lion trade and its product on

sustainable manner



Timeline: By 2011

Target 6.3: National policy for sustainable utilization of lions in place within 5 years

<u>Activity 6.3.1:</u> Conduct awareness on lion use among decision makers at District, Provincial, national and regional levels

Actors: MICOA

**Indicators:** Number of meetings, workshops, posters and website

Timeline: By 2014

Activity 6.3.2: Advocate for wildlife use to be an agenda item at District, Province and national meetings that are relevant to local and national economies

Actors: MICOA

Indicators: Numbers of Meetings, % of people attending the meetings, % district

covered

Timeline: By 2014

Activity 6.3.3: Collect and analyze relevant information on sustainable use

Actors: MITUR, MINAG

**Indicators:** Data base on lion use in place

**Timeline:** By mid 2011

<u>Activity 6.3.4:</u> Conduct training for relevant stakeholder at all levels (district, Province and national) on sustainable lion utilization

Actors: MICOA

Indicators: Numbers of Meetings, % of people attending the meetings, % district

covered

**Timeline:** By mid 2014

### **RESPONSIBILITIES**

6

Dear colleagues of DNAc and DNTF, please provide your idea on how better define the role and responsibilities of all actors



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# ANNEX 1 Log Frame Definitions

This National Strategy and Action Plan for the conservation of lions in Mozambique was developed in a workshop process using the so-called 'logical framework' (LogFrame) 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 widely accepted management tools used for improving the performance of interventions. The LogFrame facilitates the coherent, logical and succinct presentation of the links between different parts of an intervention and identifies strategic elements (Goal, Objectives, Targets and 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 different from the Vision 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);
- A Target should be defined as a direct result or outcome of an Activity or Action.
- Targets should be **S.M.A.R.T**.: Specific, Measurable, Attainable, Relevant and Timebound.

### **Activity or Action**

• An operation with a defined actor (responsibilities), method and schedule to reach a Target.



### **ANNEX 2**

# The Logical Framework of the Strategy and Action Plan for the Conservation of lion in Mozambique

## TO BE INSERTED AFTER COMMENTS AND CHANGES



### Annex 3

# List of Participants of the National Workshop for the Conservation of Lion in Mozambique

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# ANNEX 4 List of Institution Involved in Implementation, Supervision and Revision

Dear colleagues at DNTF and DNAC please provide your list here!



# ANNEX 5 List of Foreign Partners Institutions for Transfrontier Management

Dear colleagues at DNTF and DNAC please provide your list here!



# ANNEX 6

# Agenda of the National Workshop on the Conservation of Lion

## Development of the African Lion Conservation Strategy for Mozambique

# Maputo 16<sup>th</sup> and 17<sup>th</sup> of July 2009

#### **WORKSHOP PROGRAMME**

### Day 1 (16<sup>th</sup> of July)

08:30	Welcome and Introductions (DNAC)
08:45	Official opening: Minister of Tourism
09:00	Background to the development of national, sub-regional and regional conservation strategies on the African lion (G.N. Pangeti)
09:30	Human/Wildlife conflict in Mozambique (DNTF)
10:00	Lion research and Conservation in the Niassa National Reserve (Colleen Begg)
10:30	Coffee Break
11:00	Results from the first lion survey in Mozambique (Philippe Chardonnay)
11:45	Discussion on the results of the first lion survey in Mozambique
12:30	Lunch



14:00	Background, goals, agenda and outputs from this meeting, in the context of developing a rangewide strategy for the conservation of lions (Christine Breitenmoser-Würsten, IUCN/SSC Cat Specialist Group)
15:00	Present and discuss regional logframes for lion conservation - review all aspects including vision, goal, and objectives and set in national context (Discussion by all participants, facilitated)
16:00	Working groups: review and adapt problem analysis from the regional strategy
17:00	Working group presentation of problem analysis

### Day 2 (17<sup>th</sup> of July)

### National action plan for lion conservation cont.

8:30	Working groups review and adapt targets for Mozambique (Working group)
9:15	Working groups review and adapt/develop specific (site-specific where appropriate) activities and add actors, indicators and timelines
10:30	Coffee Break
11:00	Working groups cont.
11:45	Present, review, discuss, and finalise logframe for national action plan (Discussion by all participants, facilitated)
12:30	Lunch
14:00	Presentations cont. (Discussion by all participants, facilitated)
15:30	Discussion of way forward and assignment of tasks, including preparation of report (Discussion by all participants, facilitated)
16:00	Official closing

