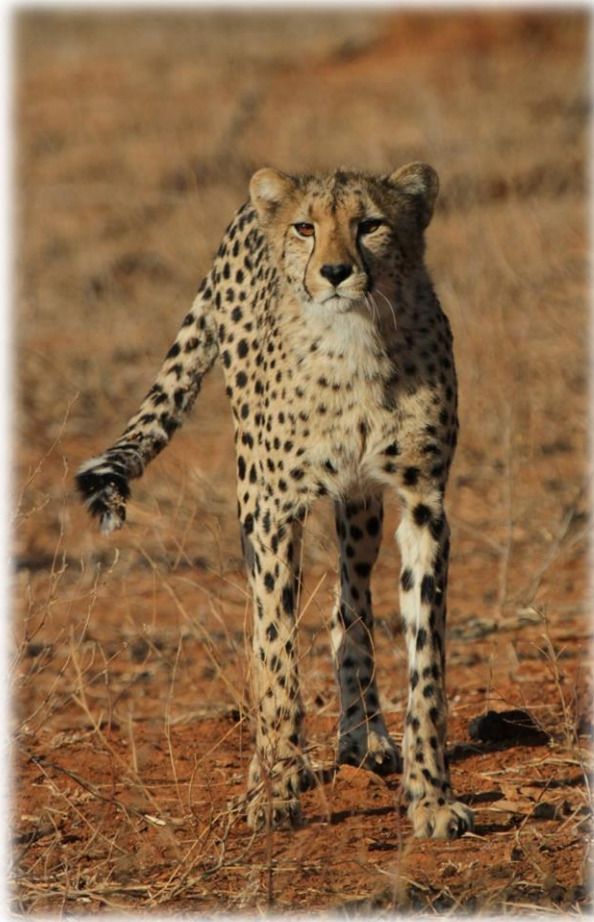


National Conservation Action Plan for Cheetah and African Wild Dogs in Angola October 2016



**National Institute of Biodiversity and Conservation Areas,
Ministry of the Environment
October 2016**



With support from





National Conservation Action Plan for Cheetah and Wild Dogs in Angola October 2016



Background

The African wild dog (*Lycaon pictus*) and the cheetah (*Acinonyx jubatus*) present major challenges for conservationists in the 21st Century. Both species were formerly widely distributed in Africa, but both have experienced dramatic reductions in numbers and geographic range in recent decades (IUCN & RWCP 2015). All large carnivores need large areas to survive; yet wild dogs and cheetahs range more widely, and hence need larger areas, than almost any other terrestrial carnivore species anywhere in the world. As human populations encroach on Africa's last wild areas, wild dogs and cheetahs – particularly susceptible to the destruction and fragmentation of habitat – are often the first species to disappear.

Both African wild dogs and cheetah are globally threatened; cheetah are listed as vulnerable on the IUCN red list (Durant et al 2015) and wild dogs as endangered (Woodroffe & Sillero-Zubiri 2012). Despite this threatened status, their ecological importance as top carnivores (Woodroffe & Ginsberg, 2005), and their value to Africa's tourism industry (Lindsey et al., 2007), remarkably little conservation action has so far been implemented for these two species. The majority of Africa's protected areas are too small to conserve viable populations, and active conservation efforts on unprotected lands have hitherto been restricted to a handful of projects. Three factors have been particularly important in hindering conservation activity for cheetahs and wild dogs:

1. The species' massive area requirements mean that conservation planning is needed on a daunting spatial scale, rarely seen before in terrestrial conservation.
2. Information is lacking on the species' distribution and status in some countries, and on the tools most likely to achieve effective conservation.
3. Capacity to conserve these species is lacking in many African countries

Against this background, conservation issues associated with wild dogs and cheetahs are being addressed together because, despite being taxonomically quite different, the two species are ecologically very similar and hence face very similar threats.

National Conservation Planning within a Range Wide Context

This national conservation action plan for the conservation of cheetahs and wild dogs in Angola was developed by the National Institute of Biodiversity and Conservation Areas (INBAC) in Angola, with support from the Range Wide Conservation Program for Cheetah and African Wild Dogs (RWCP).

Recognising the serious conservation issues facing cheetahs and wild dogs, in 2007 the Cat and Canid Specialist Groups of the IUCN/SSC, in partnership with the Wildlife Conservation Society (WCS) and the Zoological Society of London (ZSL) initiated a process to plan for the species' conservation across their combined geographic range. This process, driven by the RWCP and conducted in close partnership with government conservation authorities, aims to develop a coordinated array of national conservation action plans for all range states, nested within broader regional strategies.

The Regional Conservation Strategy for the Cheetah and African Wild Dog in Southern Africa was first developed in 2007 and revised and updated in August 2015, at a participatory workshop which included representation from Angola. This national conservation strategy for Angola was developed using the regional strategy as a framework. It is vital to bring conservation planning to the national level, because while cheetah and wild dogs use vast areas and range widely across international boundaries, wildlife conservation policy is formulated, authorised and enforced at the national level.

The National Conservation Planning Workshop for Angola

The National Action Planning Workshop for Angola was held from the 18th to 21st October 2016 in Quicama National Park, Angola. Twenty seven people participated in the workshop, eight international participants and nineteen participants from Angola. The latter included nine administrators from the nine main National Parks in Angola, five from the National Institute of Biodiversity and Conservation Areas, one from the National Directorate for Biodiversity and one from the Institute of Veterinary Services; Ministry of Agriculture. The workshop was opened and closed formally by the Director of the National Institute for Biodiversity and Conservation Areas. (A full list of participants is available in Appendix 1).



Figure 1. *Participants of the National Planning Workshop for the Conservation of Cheetah and African Wild Dogs, Quicama National Park, Angola, October 2016*

Updating the Range Maps for Cheetah and African Wild Dogs

Range category definitions:

The following range categories are used for creating the distribution maps for cheetah and wild dogs at regional and national levels. Four categories were used for revising and updating the Angolan range maps: resident range, possible resident range, recoverable range and 'unknown'. Definitions of these range types are given below. Other range categories used in the regional maps (connecting range and transient range) were not identified in Angola at this time.

(1) Residential Range:

The area still known as the residence of the species. This acknowledged knowledge that both the cheetah and the wild dogs have excellent dispersal capacities, which means that not all location points indicate the presence of a resident population; Some may indicate transient dispersion of animals. The residential range was defined as an area where (i) species were regularly detected over a period of several years; (ii) there was evidence of breeding of animals (eg. cheetah cubs, wild dogs pups or burrows spotted); and (iii) for wild dogs, were spotted complete packs (groups containing members of both sexes, generally > 3 animals) instead of small groups (≤ 3 animals), or groups of the same sex, which are likely to be groups of dispersion

(2) Possible Residential Range:

Areas where species may still be resident, but where the residence had not been confirmed in the last 10 years. Usually these would be areas that contain adequate shelter and prey but have had little or no inspection in recent years (aerial inspection are unlikely to detect any kind). Some areas were considered as constituting possible range because only unconfirmed reports (eg. reports from inexperienced observers) or only sparse, irregular observations were available or there were only reports of individuals or groups in transit. This also includes a unique survey that detected presence, but reproductive behavior

(3) Recoverable Range *:

The area where wild dogs and cheetah are currently known to be extirpated, but where the habitat and prey remain in sufficiently large areas, or the natural or assisted recovery of species may be possible within the next 10 years, if actions of reasonable conservation are implemented

** By designating areas of recoverable range, participants were asked to keep in mind that both species live in low densities and travel extensively, so they would rarely be recoverable in small areas (<3,000km²) unless intensive management (Predator-proof fencing and active population management) can be implemented*

(4) Unknown range:

The area where the state of the species is currently unknown and can not be inferred using knowledge of the local state of habitat and prey.

Status of Cheetah and African Wild Dogs in Angola

Prior to this workshop, relatively little was known about the status of cheetah and African wild dogs in Angola; the distribution maps were dominated by the 'unknown' category (Figure 2). But during the workshop, the distribution maps for both species in Angola were updated in a participatory process which harnessed the best available knowledge regarding the current situation.

Original range maps and new survey data

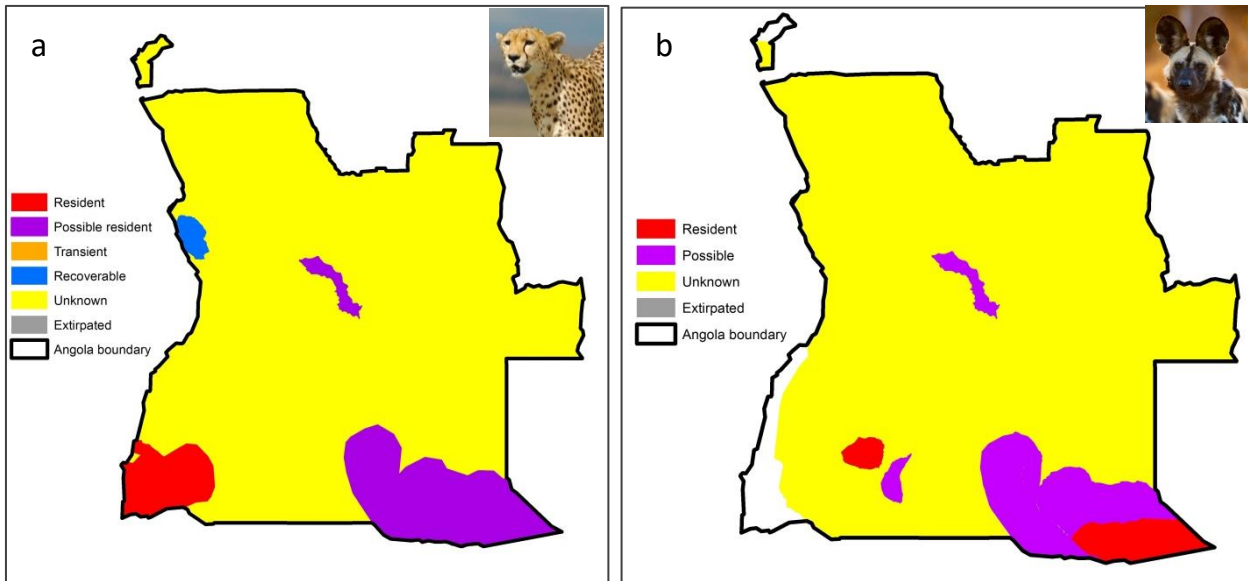


Figure 2. a) The original cheetah distribution map for Angola and b) The original African wild dog distribution map for Angola (both last updated August 2015).

Significant additional information has been gathered regarding the status of cheetah and wild dogs in Angola, largely as the result of surveys conducted in the last few years by the RWCP, Panthera and the National Geographic Okavango Wilderness Project, in partnership with MINAMB (Figure 3). These findings have also been backed up by expert opinion from Park Administrators.

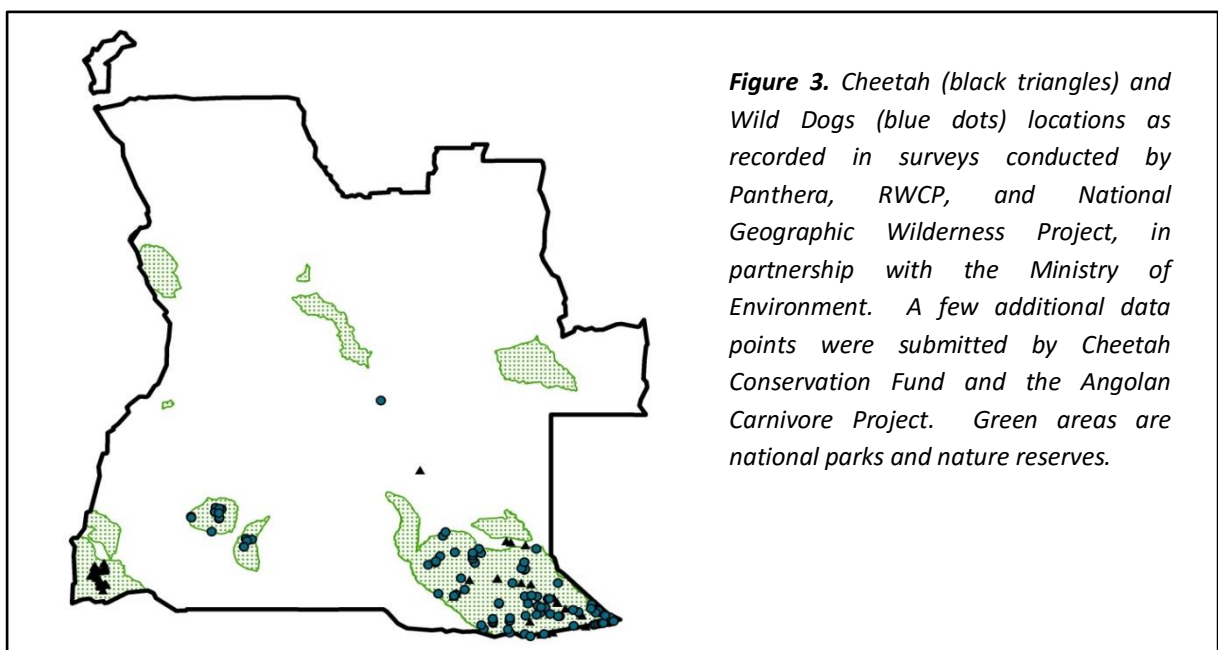


Figure 3. Cheetah (black triangles) and Wild Dogs (blue dots) locations as recorded in surveys conducted by Panthera, RWCP, and National Geographic Wilderness Project, in partnership with the Ministry of Environment. A few additional data points were submitted by Cheetah Conservation Fund and the Angolan Carnivore Project. Green areas are national parks and nature reserves.

New range maps

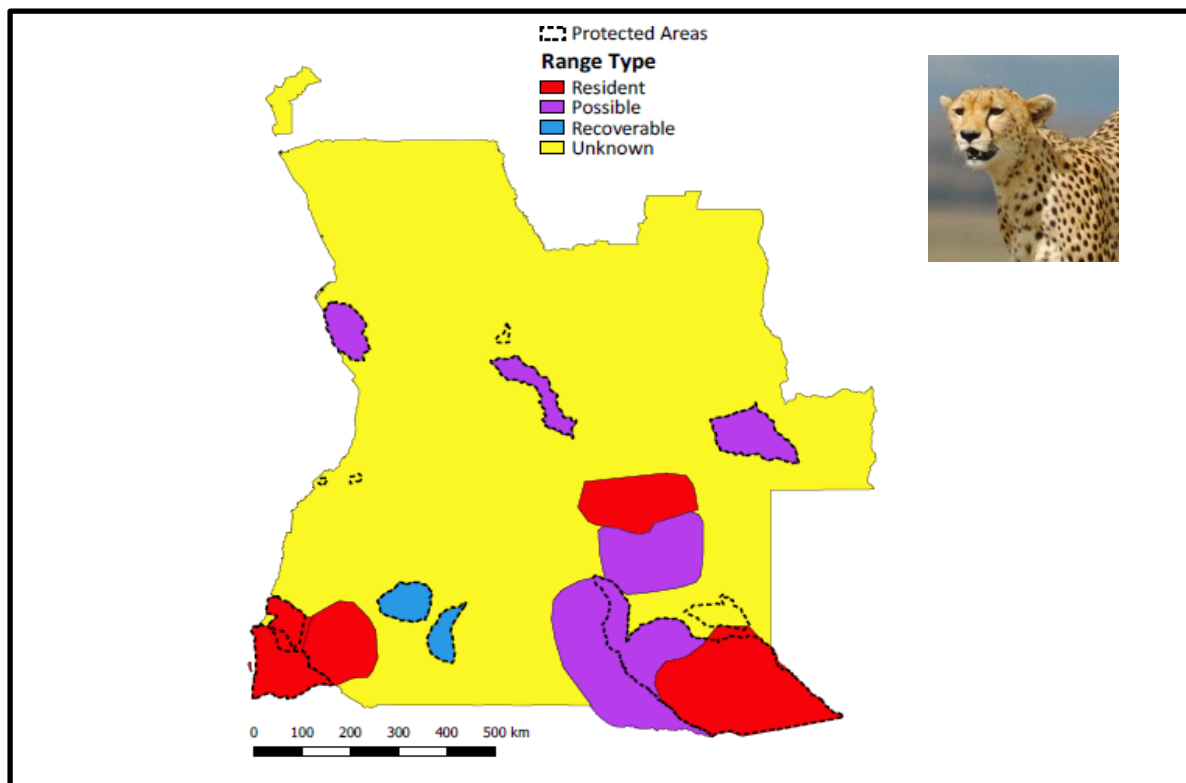


Figure 4. The updated distribution map for Cheetah in Angola (updated October 2016 at the National Conservation Planning Workshop in Quicama, Angola).

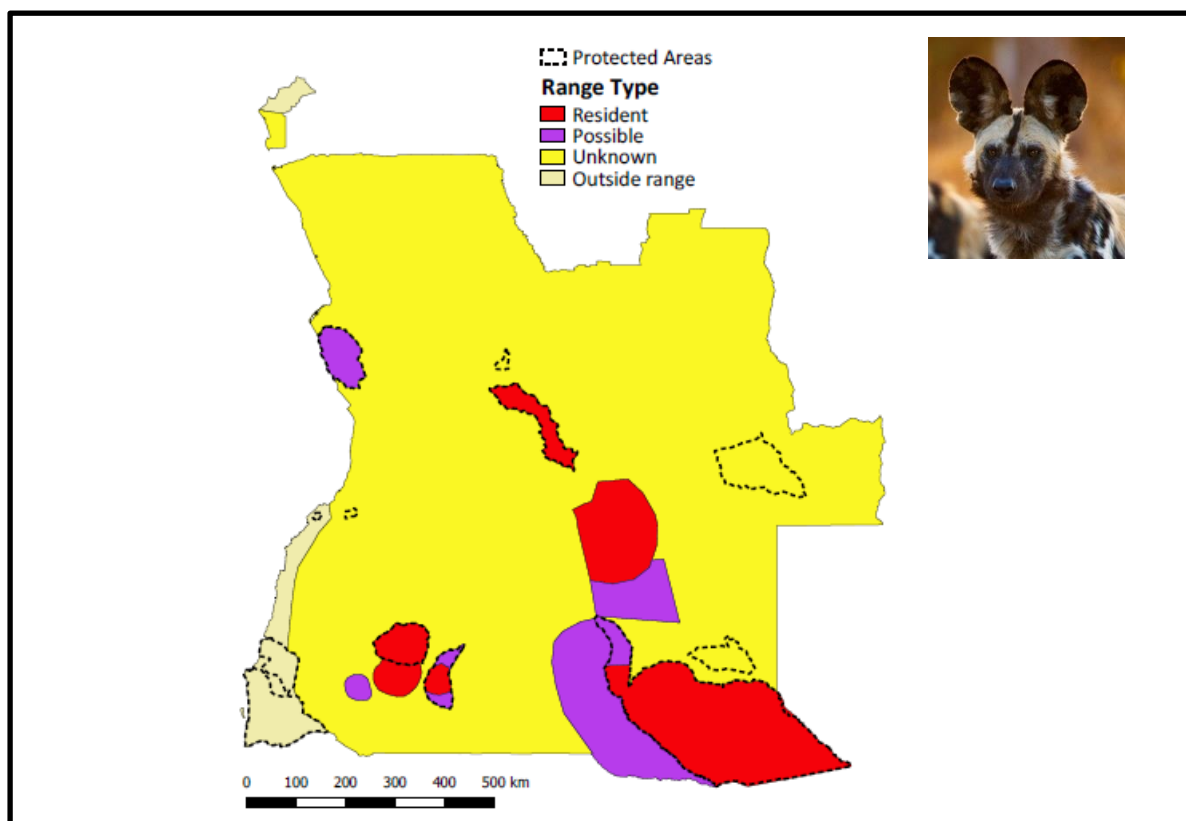


Figure 5. The updated distribution map for African wild dogs in Angola (updated October 2016 at the National Conservation Planning Workshop in Quicama, Angola).

Due to the revision of the range maps, and as can be seen by comparing Figure 2 with Figures 4 and 5, both resident range increased significantly for both cheetah and African wild dogs in Angola. In addition, more areas were designated as possible resident range (although the total land designated as possible range decreased due to converting most of the possible range of Luengue-Luiana and Mavinga to resident range for both species. The confirmation of resident wild dogs in Luando Partial Nature Reserve (Figure 5) was based on expert information from participants.

In total, resident range for cheetah in Angola increased from 44,954km² to 129,218km² whilst possible resident range changed from 129,184km² to 127,944km², but expanded to several new areas. Recoverable range increased from 8,577km² to 13,109km², through the addition of Bicuar and Mupa National Parks, and the area designated as unknown for cheetah decreased from 1,064,414km² to 977,624km².

For wild dogs, resident range increased from 39,436km² to 129,367km² and possible resident range changed from 103,377km² to 75,201km². The area designated as unknown for wild dogs decreased from 1,063,624km² to 1,004,826km². There was no recoverable range for wild dogs.

In terms of numbers, the best way to determine density is to conduct detailed ground-based surveys. However, in the absence of such data, one may be able to extrapolate from other areas of similar habitat and levels of protection. However, these density estimates can range widely (e.g. Table 1) and care must be taken to be as realistic as possible when estimating numbers. Wherever possible, it is preferable to refer to area designated as resident range.

Table 1. Density estimates for cheetah from different populations in Africa (from Belbachir et al. 2015).

Location	Density (no. of individuals per 100 km ²)	Home range (km ²)		Reference
		Territorial	Non territorial	
Namibian farmlands, Namibia	0.25-0.83	1716		Marker 2002; Marker et al. 2008
Kruger National Park, South Africa	0.88	126	195	Bowland 1995; Broomhall et al. 2003
Serengeti National Park, Tanzania	2.5	48	777-833	Caro 1994; Durant et al. 2011
Ahaggar Cultural Park, Algeria	0.023	1583		Belbachir et al. 2015

Development of the Angolan National Conservation Strategy

The first step in producing the conservation strategy is to develop a vision and goal for the strategy. The next step is to conduct a problem analysis to ensure that all key problems for cheetah and wild dog conservation in Angola are addressed in the objectives and desired results of the strategy. Thereafter, participants review and adapt the objectives, targets and activities, using the regional strategy as a framework.

Vision and Goal Statements

The vision and goal of the regional strategy were discussed in plenary to adapt them for a national action plan for Angola. There was consensus among participants that the vision and goal that had been developed for the regional strategy was largely relevant at the national level of planning, and only small adjustments were made to make them relevant for Angola.

The final vision and goal statements were agreed as follows:

Vision

Ensure viable populations of cheetah and wild dogs in the various ecosystems, contributing to their integrity, which coexist and are valued by Angolans

Goal

To improve the status (population viability, distribution, ecological functionality and population perception) of cheetah and wild dogs, guaranteeing the increase of viable populations according to their distribution in Angola

This vision was carefully worded to reflect the following points:

- “Viable” populations implies both sustainable and relatively large populations that are able to persist in the long term.
- “Various ecosystems” was included to reflect that the group agreed that the species should be conserved across a range of habitats, rather than concentrating in a single ecoregion or habitat.
- “Coexist with” was included in recognition that the majority of cheetah and wild dog range falls outside protected areas, and hence their long term survival depends on finding means for their coexistence with people.
- That cheetah and wild dogs should be “valued by the people of Angola” was included to indicate that cheetah and wild dogs should be ‘valued’ by people, including through economic, cultural and ecological values.

As with the vision, the wording of the goal was carefully and deliberately developed to reflect the following:

- “Improve the status” indicated that the group wanted to ensure that conservation of cheetahs and wild dogs is not merely maintained, but is improved. The word ‘status’ incorporates ‘population status’ (i.e. population viability, distribution and ecological functionality) as well as ‘status’ in terms of people’s perceptions – which were thought to be often too negative.

- “secure additional viable populations” indicated that the group wanted to increase existing populations, rather than maintain the *status quo*.

Problem Analysis

The next major step in the strategic planning process was the development of the problem analysis. The problem tree from the regional strategy was shown to participants and then everyone was asked to write what they considered to be the top ten problems for cheetah and wild dog conservation in Angola on flashcards. These were then loosely grouped according to theme, and a new problem analysis for Angola (Figure 6) was derived. There were some cross cutting issues and some problems that could apply to more than one theme, so they were simply grouped as made the most sense, and worked best for Angola.

The themes the problems were grouped into included:

1. Capacity development
2. Knowledge and information
3. Information transfer
4. Coexistence
5. Land use
6. Policy and legislation
7. National planning

There was a significant emphasis on capacity needs and insufficient knowledge during the discussions around creating this problem tree.

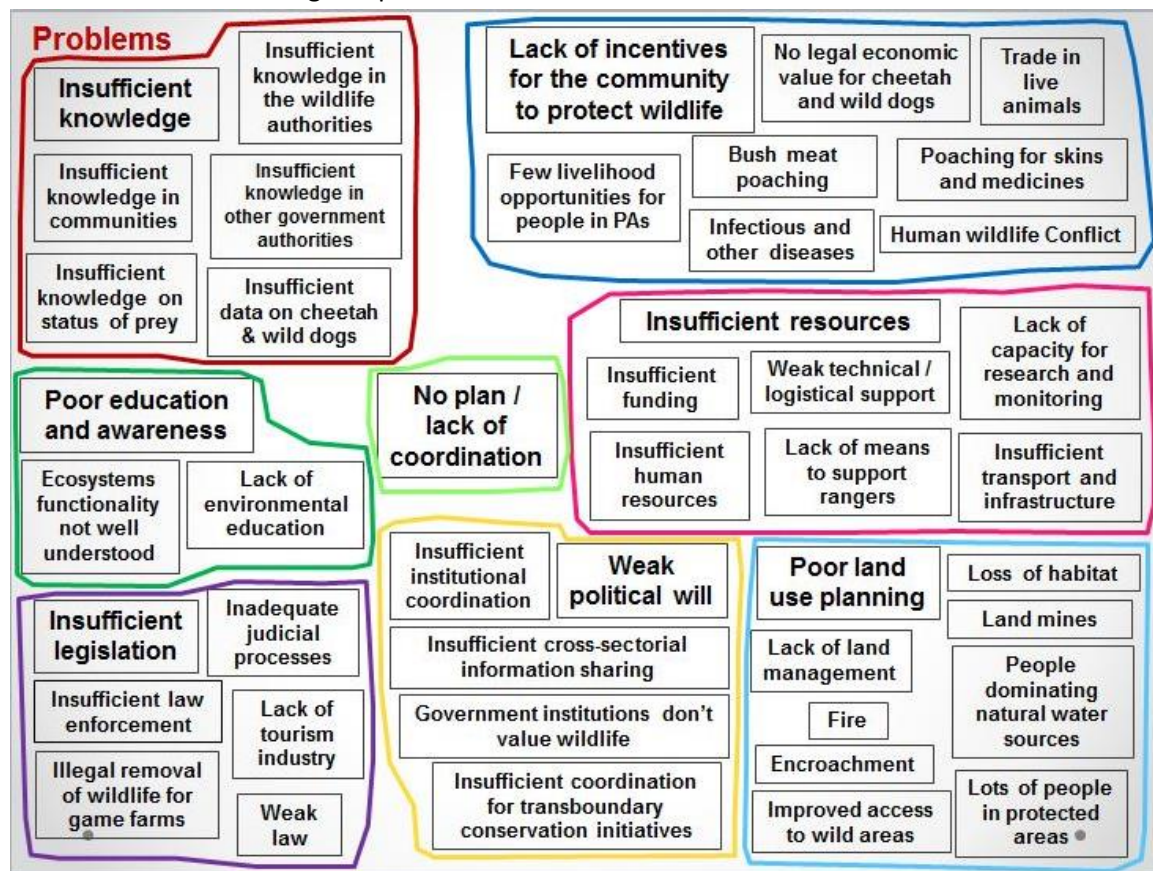


Figure 6. The problem tree for cheetah and wild dog conservation in Angola, organised into themes to fit with the themes and objectives of the regional strategy. Maroon = Knowledge and Information, Dark blue = Coexistence, Pink = Capacity Development, Light blue = Land Use Planning, Yellow = Political Commitment, Purple = Policy & Legislation, Dark green = Information transfer, Light green = National Planning

Objectives

Keeping the problem analysis in mind, the objectives of the regional strategy were discussed in plenary before splitting up into working groups to refine the wording to suit the Angolan situation. The final objectives were:

1. *To develop specific capacities in all aspects of the conservation of the cheetah and wild dogs in Angola.*
2. *To improve knowledge and generate information for the conservation of cheetah and wild dogs in Angola*
3. *Reinforce the commitment of stakeholders and raise awareness at all levels on the conservation of the cheetah and the mabeco in Angola through relevant information transfer.*
4. *Develop and improve mechanisms for the coexistence of the population living with wild dogs and cheetah*
5. *Promote best land-use practices for the conservation of cheetah and wild dogs and minimize adverse effects.*
6. *Advocate the political commitment for the conservation of cheetah and wild dogs*
7. *Strengthen national and local legislation and advocate for international cooperation in support of the conservation of cheetah and wild dogs*
8. *Implement and update the national action plan and use other relevant legal instruments to support the conservation of cheetah and wild dogs.*

Working groups

After agreeing on the vision and goal, participants were divided at random into four working groups, with each group taking two themes. The first task was to come up with a set of objectives, based on the objectives in the regional strategy, but adapted for Angola. Once the objectives had been revised and agreed on in plenary, the working groups continued to develop a set of results and activities to address each objective. The working groups are shown below.

1) *Land Use Planning and National Planning*

Elizeth Gonçalves
Miguel Boana Savituma
José Maria Kandungu
Sara Fernandes
António João
Antonio Jose Lopes



2) *Capacity development and Policy and Legislation*

Abias Huongo
Suzana Bandeira
Gercilina André
João Jinga
Agostinho Gabriel
David Elizalde



3) *Coexistence and Political Commitment*

Iracelma Machado
Joaquim Fernandes
Ivania Castro
Matti Nghikembua
Salomão Castro Cambuta
Andre Mendonça



4) *Knowledge and Information and Information Transfer*

José Maria Bizi
Francisco Bango Kangolo
Hernani de Oliveira
Célsia Africano
Ezequiel Fabiano



Results and Activities

When developing the results and activities, participants were encouraged to closely evaluate the elements from the regional strategy and revise them accordingly, as well as adding or removing elements in order to ensure that the plan is appropriate and relevant for Angola. These were all presented and discussed in plenary, before being finalized.

The final revisions to the results and activities under each objective are included in the final strategy below and in the logframe in Appendix 4.

The plan and it's implementation

The following National Conservation Action Plan represents three days of hard work from 30 participants from across Angola and internationally. It was developed during a participatory process and represents a consensus opinion of the activities that need to be undertaken to address the eight objectives of the plan and, ultimately, the vision and the goal.

Emphasis was put on trying to make the plan realistic, but also somewhat optimistic, agreeing that the conservation situation in Angola would improve in the next five years.

All participants agreed to help to support the implementation of the plan, either directly where possible, or by engaging with and motivating partner organisations or other government ministries to implement certain activities.

The plan is intended to be flexible and adaptable and will be reviewed after five years to establish progress and update the plan. All targets and activities listed in the plan should be either fully or partially addressed within five years.

National Conservation Action Plan for Cheetah and African Wild Dogs in Angola

Vision

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Goals

To improve the status (population viability, distribution, ecological functionality and population perception) of cheetah and wild dogs, guaranteeing the increase of viable populations according to their distribution in Angola

Objectives, Results and Activities

Capacity Development

1. To develop specific capacities in all aspects of the conservation of the cheetah and wild dogs in Angola.

1.1. Developed a matrix of the partners of implementation of PAN of Cheetah and Wild Dogs

- 1.1.1. Identify and contact all institutions that may be relevant to the conservation of cheetah and wild dogs, in order to define their level of intervention [6 months, INBAC]

1.2. Result: Identify capacity gaps in all areas related to the conservation of cheetah and mabeco in Angola in the next two years (NCC, INBAC)

- 1.2.1. Compile and report training needs for each National Park and Natural Reserve, including a) Monitoring and resolution of conflicts, b) Habitat management, c) monitoring and research, d) education and dissemination. [6 months, INBAC].
- 1.2.2. Compile and report capacity building needs for MINAMB, INBAC, DNB and IDF. [6 months, INBAC]
- 1.2.3. Compile and report capacity building needs for other Government institutions (eg. Training and education for conservation, land use planning and development favorable for the conservation of cheetah and wild dogs) [6 months, INBAC].
- 1.2.4. Compile and report knowledge gaps and training needs in other institutions in Angola (Universities, Polytechnic Institutes, Institute of Veterinary Services, Defense and Security Agencies) [1 year, INBAC].

1.3. Result: Organized and developed relevant programs and activities satisfying the conservation needs of Chita and Wild Dogs (INBAC/RWCP)

- 1.3.1. Design appropriate programs and resources to address knowledge gaps in National Parks and Natural Reserves (eg. Workshops, fieldwork training, exchange visits, posters and leaflets) [5 years, INBAC]
- 1.3.2. Motivate to increase resources and financial support for National Parks and Private Reserves. [5 years, INBAC and partners]

- 1.3.3. Organize training workshops for all stakeholders, in all necessary areas that can assist in the conservation of cheetah and wild dogs. [5 years, INBAC and partners]
- 1.3.4. Organize training workshops for other governmental institutions to provide them with the necessary information on the needs for the conservation of cheetah and wild dogs. [5 years, INBAC and partners]
- 1.3.5. Design appropriate programs to meet training needs in other institutions. [5 years, INBAC & RWCP].

1.4. Result: Implemented programs, activities and workshops of 1.2 over the next 5 years. (INBAC/RWCP/Other relevant training institutions)

- 1.4.1. Produce and disseminate training modules to fill knowledge gaps [1 year, INBAC & RWCP]
- 1.4.2. Produce and disseminate training materials (eg. posters and leaflets) with relevant information on the conservation of cheetah and wild dogs (including how to distinguish cheetah from leopard and serval) [2 years, INBAC, RWCP & partners].
- 1.4.3. Create a Web Portal and / or online training modules (or CD). [2 years, INBAC & partners].
- 1.4.4. Conduct relevant training courses and workshops. [5 years, INBAC and partners]
- 1.4.5. Organize exchange visits and relevant field training. [5 years, INBAC and partners]

Knowledge and information

2. To improve knowledge and generate information for the conservation of cheetah and wild dogs in Angola

2.1. Improved understanding of the demographics, distribution, biology and ecology of cheetah and wild dogs

- 2.1.1. To develop studies on the dispersion of both species, including factors that influence the dispersion of cheetah and wild dogs [3 years, INBAC and partners].
- 2.1.2. Carry out studies on the diet of cheetah and wild dogs in different areas of occurrence [3 years, INBAC, ISV and Universities].
- 2.1.3. Evaluate the viability and connectivity of the cheetah and wild dogs populations [3 years (depending on the areas), INBAC and partners].
- 2.1.4. Continue to contribute to the cheetah and wild dogs atlas [5 years, INBAC]
- 2.1.5. Continue to conduct research in unknown and possible areas to assess the status of the population and the distribution of cheetah and wild dogs [5 years, INBAC, MAT].
- 2.1.6. Evaluate factors that may influence restocking in recoverable areas [5 years, INBAC, RWCP and partners].
- 2.1.7. Maintain and expand long-term monitoring programs for cheetah and wild dogs populations in areas of occurrence [2 years / INBAC and partners].
- 2.1.8. Research, collect and apply practical guidelines and ethical considerations for the conservation, tourism, and reintroduction of cheetah and wild dogs [5 years, INBAC and partners].
- 2.1.9. Continue research using new monitoring methods (where necessary) for the conservation of cheetah and wild dogs [5 years, INBAC, RWCP].

2.2. Standardized quantitative knowledge on threats such as poaching, habitat breakdown, fragmentation, illegal trade, climate change, irresponsible tourism and management of captive animals and farms

- 2.2.1. Collection and dissemination of best practice information on the management of cheetah and wild dogs in captivity to mitigate illegal trade [2 years, INBAC and partners]
- 2.2.2. Collecting and disseminating information on current and emerging threats to the conservation of cheetah and the mabeco victim of poaching [2 years, INBAC and partners].
- 2.2.3. Collect and disseminate information on current and emerging threats of cheetah and wild dogs conservation of unsustainable tourism activities [2 years, INBAC and partners].
- 2.2.4. Collect and disseminate information of threat from the farms to the cheetah and wild dogs [2 years, INBAC and partners].
- 2.2.5. Recolha e disseminação de informação sobre a ameaça de destruição e fragmentação do habitat da chita e do mabeco Collect and disseminate information on the threat of destruction and fragmentation of cheetah and wild dogs habitat [5 years, INBAC and partners].
- 2.2.6. Collect and disseminate information from conservation models and illustrating the potential conservation benefits as an alternative to farms. [3 years, INBAC and partners].

2.3. Standardized knowledge of conflict mitigation between humans and carnivorous provided to local communities on the range of the cheetah and wild dogs in Angola within two years.

- 2.3.1. Establish a technical working group on the human-carnivorous conflict in Angola. [6 months, INBAC and partners].
- 2.3.2. Angola's technical working group will engage with the African Carnivorous Human Conflict Working Group established under the Southern Africa regional strategy magazine (2015) to ensure that information on the human-carnivorous conflict is collected in Angola are incorporated into a regional good practice manual for conflict mitigation for predators [5 months, INBAC & partners].
- 2.3.3. Angola's technical working group will engage with all NGOs, the scientific community, and government with knowledge of the human-carnivorous conflict in Angola to solicit their involvement in the contribution of the regional manual of good practices to mitigate the human-carnivorous conflict [3 months, INBAC & partners].
- 2.3.4. The Angolan technical working group will compile data and available information on conflict issues and mitigation solutions in Angola and make them available to the African Carnivorous Human-Conflict Working Group [3 months, INBAC & partners].
- 2.3.5. The Angolan working group will engage with the African Carnivorous Human Conflict Working Group to ensure that Angola's information needs and context are accurately incorporated into a practical, useful, 'live' regional document for delivery to general public. [5 years, INBAC and partners].

- 2.3.6. Angola's technical working group will develop and implement the strategy for delivering the document to local communities in Angola. [3 years, INBAC & partners].

Transfer of information

3. Strengthen the commitment of stakeholders and raise awareness at all levels on the conservation of the cheetah and wild dogs in Angola through relevant information transfer.

3.1. Shared information on the relevant benefits of cheetah and wild dogs conservation among government, land users and local communities

- 3.1.1. Hold meetings and workshops with government, land users and local communities to exchange knowledge and information on incentives and benefits derived from the conservation of cheetah and wild dogs [5 years, INBAC, DNB and partners].

3.2. Dissemination of environmental education programs on the conservation of cheetah and wild dogs at the national level

- 3.2.1. Continue to develop mechanisms for the interactive collection of observations, data, findings and activities relevant to the conservation of the cheetah and wild dogs based on the internet [5 years, INBAC and partners].
- 3.2.2. Continue to develop the use of posters, brochures, video, photos, social media and theater groups to disseminate information in communities [5 years, INBAC and partners].
- 3.2.3. Ensure minimum standards of data collection in potential areas of occurrence of the cheetah and wild dogs especially where there is no information [5 years, INBAC & RWCP].

3.3. Raise awareness at the national level on the threats of the cheetah and wild dogs

- 3.3.1. Continue to establish competitions, tests and others in schools and groups to intensify and enhance education on the conservation of the cheetah and wild dogs [5 years, INBAC]
- 3.3.2. Integrate the activities related to cheetah and wild dogs in the curricular plan and in the activities of NGOs related to the environment [5 years, INBAC and partners].
- 3.3.3. Create and encourage the sponsorship of sports teams, clubs and groups with cheetah and wild dogs names at all levels [5 years, INBAC and partners].

3.4. National symposiums on cheetahs and wild dogs

- 3.4.1. Promote workshops on the conservation of cheetah and wild dogs at annual scientific symposia [5 years, INBAC and partners].
- 3.4.2. Continue to participate in various stakeholder meetings (eg. those not directly involved in conservation) to disseminate information on the conservation of cheetah and wild dogs [5 years, INBAC and partners].

3.5. Considerable growth in stakeholder awareness on issues relating to the conservation of the cheetah and wild dogs

- 3.5.1. Continue to develop and disseminate environmental education and awareness material for all age groups nationwide [5 years, INBAC and partners].
- 3.5.2. Create and implement multimedia programs to increase sensitivity and understanding of the conservation of cheetah and wild dogs in all areas nationwide [5 years, INBAC and partners].
- 3.5.3. Sensitize government leaders, traditional and local authorities, among others on the conservation value of the cheetah and wild dogs [5 years, INBAC and partners].
- 3.5.4. Establish synergies with existing initiatives, provide information and relevant material to support the decision-making of judicial institutions [5 years, INBAC and partners].

Coexistence

4. Develop and improve mechanisms for the coexistence of the population living with wild dogs and cheetah

4.1. Reduced indiscriminate slaughter of cheetah and wild dogs

- 4.1.1. Create capacity for monitoring the populations of cheetah and wild dogs throughout the territory and compare the data annually at national level and every three years with the region. [5 years, INBAC and partners].
- 4.1.2. Create legislation relevant to the indiscriminate killing of cheetah and wild dogs [3 years, DNB and partners].
- 4.1.3. Identify areas of conflict and clarify the size of the current versus the damage caused by cheetah and wild dogs on a progressive basis [Crime units]
- 4.1.4. Raise awareness to relevant stakeholders about farming practices and breeding of production animals, proven to reduce depredation, on a progressive basis [ISV]
- 4.1.5. Develop and implement a national standard of response procedures adapted to conflict situations and encourage the exchange of experience at regional level (capture procedures, animal control, translocation, among others) [5 years, Crime Units]
- 4.1.6. Establish rapid response teams that implement animal man conflict resolution actions with promptness and effectiveness in conflict situations throughout the national territory [5 years, Crime Units]
- 4.1.7. Create and implement continuously the Program to combat negative perceptions of cheetah and wild dogs at all levels [5 years, DNA].

4.2. Reduced levels of incidental mortality of the cheetah and wild dogs within national territory

- 4.2.1. Create and implement programs to monitor the mortality rate of cheetah and wild dogs and compare data annually at the national level. [5 years, INBAC, RWCP and partners].

- 4.2.2. Strengthen the fight against poaching. Create environmental education programs and promote the integration of local communities on a progressive basis [Ongoing, INBAC, DNA and partners].
 - 4.2.3. Create and implement programs proven to be effective in the management of diseases that threaten the viability of the cheetah and wild dogs populations [5 years, ISV].
 - 4.2.4. Create and implement programs to assist in the substantial reduction of cheetah and wild dogs mortality by running over [5 years, INBAC and partners].
 - 4.2.5. Create and implement laws and programs to reduce the mortality of cheetah and wild dogs by poisoning [5 years, INBAC and partners].
- 4.3. Significant increase in intrinsic and economic value of cheetah and wild dogs for five years.**
- 4.3.1. Highlight the intrinsic value of cheetah and wild dogs, quantify and monitor the economic value of these species in national territory [5 years, INBAC, MINHOTUR]
 - 4.3.2. Carry out wildlife-based economic activities that promote the conservation of cheetah and wild dogs for the direct benefit of communities and other stakeholders [5 years, INBAC and partners].
 - 4.3.3. Investigate and highlight the cultural significance of the cheetah and wild dogs nationally [5 years, INBAC, MAT].
 - 4.3.4. Develop alternative means of livelihood for local communities [5 years, MINAGRI, MINFAM].
 - 4.3.5. Creation of projects for the development of capacities related to the conservation of cheetah and wild dogs [5 years, INBAC and partners].
- 4.4. Forbidden illegal maintenance of cheetah and wild dogs in captivity**
- 4.4.1. To propose the creation of prohibitive legislation that regulates the maintenance of the cheetah and wild dogs in captivity and progressive monitoring [2 years, DNB].
- 4.5. Create socio-economic mechanism to encourage balanced coexistence in cheetah and wild dogs occurrence areas**
- 4.5.1. Identify and engage stakeholders and experts in solving socio-economic threats to the conservation of cheetah and wild dogs [5 years, INBAC and partners].
 - 4.5.2. Identify socioeconomic factors related to the conservation of cheetah and wild dogs [2 years, INBAC and partners].
 - 4.5.3. Develop and implement strategies to find solutions to mitigate socio-economic threats to the conservation of cheetah and wild dogs [5 years, INBAC and partners].

Land Use

5. Promote best land-use practices for the conservation of cheetah and wild dogs and minimize adverse effects.

- 5.1. Addressed the current trends and land use proposals according to the conservation needs of cheetah and wild dogs.**

- 5.1.1. Establish relationships with the entities responsible for the elaboration and implementation of land use strategies in the Country [1 year, INBAC]
- 5.1.2. Develop guidelines based on successful land-use strategies for the conservation of cheetah and wild dogs [2 years, Ministry of Territory Administration and INBAC].
- 5.1.3. Involve the industry in a constructive way, in order to promote best management practices and identify opportunities that benefit the conservation of cheetah and wild dogs [2 years, INBAC and partners].

5.2. Integrated and innovative land use management plan to facilitate the conservation of the cheetah and wild dogs.

- 5.2.1. Identify and recommend guidelines in collaboration with the Government and the private sector for social and environmental responsibility aligned with the conservation of cheetah and wild dogs [6 months, DNB and INBAC].
- 5.2.2. Coordinate sectoral communication between all key players, including the private sector, to facilitate cooperation and collaborative initiatives for the benefit of cheetah and wild dogs [5 years, DNB and INBAC].
- 5.2.3. Promote sectoral participation in the Range Wide Conservation Program (2 years, DNB and INBAC).

5.3. Promoted land use for the establishment of wildlife management units by raising awareness of the potential benefits over a period of five years.

- 5.3.1. Promote awareness for the creation of partnership opportunities in the management of wildlife areas for the benefit of the conservation of the cheetah and wild dogs [5 years, DNB, INBAC, National Institute of Environmental Management (INGA)].
- 5.3.2. Monitor the creation of wildlife management units and their influence on the conservation of cheetah and wild dogs, allowing sustainable management [5 years, INBAC].
- 5.3.3. Optimize the distribution of resident populations, maintain and restore ecological corridors and ensure the restoration of at least 20% of possible and recoverable areas to facilitate the expansion of the cheetah and wild dogs populations [5 years, MAT and INBAC].
- 5.3.4. Promote cheetah and wild dogs as priority species in conservation initiatives in extensive surface areas, including TFCAs [5 years, INBAC, DNB].

5.4. Distribution areas of cheetah and wild dogs expanded in Angola through the introduction of these in areas considered as recoverable.

- 5.4.1. Identify appropriate habitats for the conservation of cheetah and wild dogs [2 years, Ministry of Agriculture, INBAC and RWCP].
- 5.4.2. Engage partner organizations and relevant government authorities to establish reintroduction plans [6 months, INBAC and MINAGRI].
- 5.4.3. Ensure that reintroduction plans comply with IUCN guidelines [5 years, Institute of Veterinary Services, AGT and INBAC].
- 5.4.4. Identify populations of cheetah and wild dogs, including in regional and international pedigree records, to find populations with genetic viability [5 years, Institute of Veterinary Services, INBAC and partners].

- 5.4.5. Monitor the reintroduction efforts of animals and of these individually, at least five years after their release [5 years, Institute of Veterinary Services and INBAC].

5.5. Promoted the involvement of local communities in the management of natural resources in areas with potential for the conservation of cheetah and wild dogs.

- 5.5.1. Identify and prioritize areas of natural resources that favor the conservation of cheetah and wild dogs, based on good practices of land use [2 years, Ministry of Agriculture & INBAC].
- 5.5.2. Gather local capacity, resources, services and expertise to maximize partnership opportunities that promote potential conservation areas of cheetah and wild dogs [2 years, DNB & INBAC].
- 5.5.3. Evaluate the efficiency of land use and its results for the promotion of the conservation of cheetah and wild dogs, facilitating an integrated management [5 years, Ministry of Agriculture & INBAC].
- 5.5.4. Strengthen and increase (20%) buffer zones around areas with potential for conservation of cheetah and wild dogs by promoting community participation and partnership opportunities [5 years, DNB, MAT & INBAC].

5.6. Livestock and agriculture do not condition the area needed for the conservation of cheetah and wild dogs.

- 5.6.1. Coordinate with trainers in relevant specialties the training of agricultural communities regarding the sustainable management practices of areas appropriate to the occurrence of cheetah and wild dogs [5 years, Ministry of Agriculture & INBAC].
- 5.6.2. Evaluate the efficiency of cattle rearing practice and extensive area management programs in relation to the conservation needs of cheetah and wild dogs; disseminate results annually and report on integrated management strategies [5 years, Ministry of Agriculture, Institute of Veterinary Services & INBAC].

Political commitment

6. Advocate the political commitment for the conservation of cheetah and wild dogs

6.1. Approved a cooperation agreement for the conservation of cheetah and wild dogs at all levels

- 6.1.1. Articulate with local and international advocacy organizations to achieve the results outlined in this Action Plan [3 years, DNB]
- 6.1.2. Draw up a national agreement in collaboration with international advocacy organizations on how to conserve the cheetah and wild dogs [3 years, DNB]
- 6.1.3. Present the agreement at national level and submit for approval [1 year, DNB]

6.2. Promoted Relevant cross-border agreements for the conservation of cheetah and wild dogs

- 6.2.1. Develop and promote agreements and strategies that will benefit the conservation of cheetah and wild dogs [3 years, DNB]

- 6.2.2. Articulate and build partnerships with national and international advocacy organizations to achieve cross-border conservation efforts. [3 years, DNB]

Policy and Legislation

7. Strengthen national and local legislation and advocate for international cooperation in support of the conservation of cheetah and wild dogs

7.1. Evaluated and enhanced the relevance and efficiency of current national and local policies and legislation on the conservation of cheetah and wild dogs.

- 7.1.1. Identify existing national and international legislation that may support the promotion of the conservation of cheetah and wild dogs [6 months, INBAC]
- 7.1.2. Implement and promulgate new policies, protocols and legislation [5 years, DNB & INBAC].
- 7.1.3. Investigate how existing MEAs can facilitate the conservation of cheetah and wild dogs and make recommendations [1 year, INBAC].
- 7.1.4. For legislation that does not adequately address the conservation of these two species and for which there is no planned review propose and develop specific legislation [5 years, DNB].

7.2. Promoted international cooperation for the conservation of cheetah and wild dogs

- 7.2.1. Contact other countries to establish partnerships and develop policies and programs to promote the conservation of cheetah and wild dogs [5 years, INBAC & DNB].
- 7.2.2. Advocate for the country to be part of international conventions of relevance for the conservation of cheetah and wild dogs [5 years, MINAMB]
- 7.2.3. In international meetings and conferences of the parties related to Biodiversity advocate for the conservation of the cheetah and wild dogs [5 years, INBAC].

7.3. Strengthened the capacity of judicial bodies to implement the conservation policies of cheetah and wild dogs

- 7.3.1. Motivate and sensitize judicial bodies in the elaboration of effective policies for the conservation of cheetah and wild dogs [5 years, DNA, INBAC, DNB & PGR]
- 7.3.2. Identify the networks of monitoring structures and advocate for them to act in the areas of occurrence of the cheetah and mabeco and prioritize the training needs and resources for the application of the conservation policies of both species [2 years, INBAC, IDF & Crime Units].
- 7.3.3. Ensure the necessary resources to strengthen the implementation of legislation [3 years, INBAC and partners].
- 7.3.4. Maintain progressive engagement with existing networks that address issues of poaching and livelihoods, enforcement, illegal wildlife trade relevant to the conservation of cheetah and wild dogs [5 years, INBAC, Environmental Crimes Unit, FAA, Border guard Police, IDF & AGT]

7.4. Incorporate the strategy for the conservation of the cheetah and wild dogs in the national conservation plans.

- 1.1.1. Integrate the national plan of action of conservation of cheetah and wild dogs in the national strategy and plan of action of biodiversity (NBSAP) [1 year, DNB].
- 1.1.2. Integrate the conservation plan of cheetah and wild dogs in the implementation of work programs for protected areas [5 years, INBAC].

National Plan

8. Implement and keep up to date the national action plan and use other relevant legal instruments that support the conservation of cheetah and wild dogs.

8.1. National Action Plan Implemented

- 8.1.1. Indicate the national coordinator of the Plan of Action for the conservation of cheetah and wild dogs [1 month, INBAC].
- 8.1.2. Encourage, coordinate and monitor the implementation of the activities contained in the national action plan [5 years, INBAC].
- 8.1.3. Promote the involvement of stakeholders in the implementation of the national action plan [5 years, INBAC].
- 8.1.4. Disseminate the activities and results of the implementation of the national action plan [5 years, INBAC].
- 8.1.5. Create specific training mechanisms for the conservation of cheetah and wild dogs [5 years, INBAC].

8.2. National action plan revised.

- 8.2.1. Engage stakeholders to facilitate the process of revising the national plan [6 months, INBAC].
- 8.2.2. Review the national action plan in 5 years [INBAC and Partners].

8.3. Plan reviewed and implemented up to 2 years.

- 8.3.1. Identify appropriate mechanisms to guide the implementation process [6 months, INBAC & interested stakeholders].
- 8.3.2. Identify constraints, and where possible, provide means to ensure implementation of the revised national strategy [1 year, INBAC].
- 8.3.3. Encourage all stakeholders to use the revised national action plan as a permanent guideline for their conservation activities [permanent / INBAC].
- 8.3.4. Organize a national workshop for the sharing of information on the implementation process of the national action plan [6 months, INBAC].

Appendix 1 - Workshop Participants



Republic of Angola
Ministry of Environment
National Institute of Biodiversity and Conservation Areas (INBAC)

List of participants to the National Workshop on the Planning of Conservation of Chita and Mabeco in Angola

Nº	Name of Participant	Institution	Email	Data		
				19/10	20/10	21/10
01	Hernani de Oliveira	DNB (MINAMB)	hern.any23@hotmail.com	X	X	X
02	Ivânia Janilda da S. e Castro	INBAC	ivaniacastro@hotmail.com	X	X	X
03	Gercelina Alexandra André	INBAC	gercia-alexandra@hotmail.com	X	X	X
04	André Mendonça	Parque Nacional da Cangandala		X	X	X
05	João António Jinga	Parque da Chimalavera	935006558	X	X	X
06	Francisco Mbango Loy	INBAC	923096759	X	X	X
07	Matti Nghikembua	Cheetah Conservation Fund Namíbia	matti@cheetah.org	X	X	X
08	Ezequiel Fabiano	Angola Carnivore Project / University of Namíbia	fabianoezekiel@gmail.com	X	X	X
09	Russell Taylor	WWF in Namíbia	rtaylor@wwf.na	X	X	X
10	Salomão Cambuta	INBAC	929978203	X	X	X
11	Agostinho Gabriel	Parq. Nacional da Quiçama	929889299	X	X	X
12	José Maria Bizi	Parque N. do Maiombe	929633803	X	X	X
13	José Maria Kandungo	Parque Nacional do Bicular	923786618	X	X	X
14	Iracelma Machado	ISV- MINAGRI	iracelmamachado@yahoo.com.br	X	X	X
15	Abias Huongo	MINAMB/INBAC	huongoam@hotmail.com	X	X	X
16	Sarah Durant	Zoological Society of London	sdurant@wcs.org	X	X	X
17	Suzana Bandeira	INBAC	suzanaadelino22@hotmail.com	X	X	X
18	Elizeth Gonçalves	INBAC	luzolagodinha1978@yahoo.com	X	X	X
20	Rosemary Groom	RWCP	rosemary-rwcp@zsl.org	X	X	X
21	Miguel Savituma	Parque N. da Quiçama	923581625	X	X	X

22	Sara Fernandes Elizalde	University of Cape Town	<u>kikas.sara@gmail.com</u>	X	X	X
23	Célsia Isabel P.G. Africano	INBAC	<u>celsiagama@hotmail.com</u>	X	X	X
24	Joaquim Fernandes	Cendel language centre, Zimbabwe	<u>qwimfe@mail.com</u>	X	X	X
25	João António	Parque Nacional da Cameia	933789596	X	X	X
26	David Elizalde	SASSCAL	<u>delicaste@gmail.com</u>	X	X	X
27	Damião Manuel	Parque Nacional do Iona	936676132	X	X	X
28	John Hilton	Nat Geo: Okavango Wilderness Project	<u>john@wildbirdtrust.com</u>	X	X	—
29	Steve Boyes	Nat Geo: Okavango Wilderness Project	<u>steve@wildbirdtrust.com</u>	X	X	—
30	Manuel Sebastião Afonso	Parque Nacional do Iona	<u>caumba25@hotmail.com</u>	—	—	X

Appendix 2 - Agenda

Agenda: National Conservation Planning Workshop for Cheetah and African Wild Dogs in Angola

18th to 21st October 2016

Wednesday 19th October:

- 08:30 **Official welcome** and opening of the workshop (INBAC)
 - 09:00 Participant **introductions**
 - 09:20 **Background to the regional and national planning process** and the importance of the national planning workshop, including presentation of objectives and expected outcomes of the workshop (RWCP)
 - 09:40 **Cheetah and wild dog biology and threats** (RWCP)
 - 10:00 **Conservation in Angola:** opportunities and challenges (INBAC / MINAMB)
 - 10:30 TEA BREAK (and group photo)
 - 11:15 **Presentation of maps:** The status and distribution of cheetah and wild dogs in Southern Africa and what is currently known about cheetah and wild dogs in Angola (RWCP)
 - 11:30 **Presentation:** The status of cheetah and wild dogs in **Luengue-Luiana** (Rosemary Groom on behalf of Paul Funston and Jake Overton, Panthera)
 - 11:45 **Presentation:** The status of cheetah and wild dogs in **Bicuar & Mupa** (Sara Fernandes)
 - 12:00 **Presentation:** The status of cheetah and wild dogs in the **Cuito / Cubango** catchment areas (Okavango Wilderness Project)
 - 12:15 **Presentation:** The status of cheetah in **Iona NP** (Ezequiel Fabiano)
 - 12:30 **Presentation:** What is known about cheetah and wild dogs in **other areas of Angola** (INBAC)
 - 13:00 LUNCH
 - 14:00 **Updating the national distribution maps** for cheetah and African wild dogs in Angola (through participatory mapping process, facilitated by RWCP and David Elizalde)
 - 15:30 **Presentation of strategic planning approach** (RWCP)
 - 15:45 **Agreement of Vision and Goal** for the Angolan National Conservation Plan
 - 16:15 TEA BREAK
 - 16:45 **Problem Analysis.** Display of Problem Analysis from regional strategy, and discussion of problems for Angola. Participants to write top ten problems on cards for consolidation and formation of problem tree for Angola
 - 17:15 END OF DAY
-

Thursday 20th October:

- 08:30 **Presentation of updated maps** for approval in plenary
- 08:45 **Presentation of Angolan problem analysis**, with discussion and grouping by themes
- 09:15 Presentation of **Objectives** from the Regional Conservation Strategy
- 09:30 **Group split into working groups to discuss Objectives** for the Angolan National Conservation Plan
- 10:00 TEA BREAK

10:30 **Presentation of Objectives in plenary** and discussion to finalize them
11:15 Return to working groups to discuss **targets and activities**
13:00 LUNCH BREAK
14:00 Continue in working groups to discuss **targets and activities**
16:00 TEA BREAK
16:30 Continue in working groups to finalize **targets and activities**
18:00 Close of day

Friday 21st October:

08:30 **Targets and Activities presented in Plenary** by each working group (1 hour per group, including discussion and editing)
10:30 TEA BREAK
11:00 **Targets and Activities presented in Plenary** by each working group
13:00 Wrapping up and summary (RWCP)
13:10 **Closing speeches** – way forward and thanks (INBAC)
13:30 LUNCH

Participants depart for Luanda

Appendix 3 - Abbreviations and References

Abbreviations

MINAMB	Ministério do Ambiente (Ministry of Environment)
INBAC	National Institute of Biodiversity and Conservation Areas
DNB	Directorate of National Biodiversity
RWCP	Range Wide Conservation Program for Cheetah and African Wild Dogs
IUCN	International Union for Conservation of Nature
MAT	Ministry of Land Management
IDF	Forestry Institute
DNA	National Directorate of Environment
PGR	Attorney General's Office
ISV	Institute of Veterinary Services
AGT	General Tax Administration
NBSAP	National Biodiversity Strategy and Action Plan
NCC	National Carnivore Coordinator
WCS	Wildlife Conservation Society
ZSL	Zoological Society of London

References

Belbachir, F., Pettorelli, N., Wachter, T., Belbachir-Bazi, A., & Durant, S. M. (2015). Monitoring rarity: the critically endangered Saharan cheetah as a flagship species for a threatened ecosystem. *PLoS one*, 10(1), e0115136.

Durant, S., Mitchell, N., Ipavec, A. & Groom, R. 2015. *Acinonyx jubatus*. The IUCN Red List of Threatened Species 2015: e.T219A50649567. <http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T219A50649567.en>. Downloaded on **25 October 2016**

Lindsey, P. A., Alexander, R., Mills, M. G. L., Romanach, S., & Woodroffe, R. (2007). Wildlife viewing preferences of visitors to protected areas in South Africa: implications for the role of ecotourism in conservation. *Journal of Ecotourism*, 6(1), 19-33.

Woodroffe, R. & Ginsberg, J. R. (2005). King of the beasts? Evidence for guild redundancy among large mammalian carnivores. In Large carnivores and the conservation of biodiversity: 154-175. Ray, J. C., Redford, K. H., Steneck, R. S. and Berger, J. (Eds.). Washington, D.C.: Island Press

Woodroffe, R. & Sillero-Zubiri, C. 2012. *Lycaon pictus*. The IUCN Red List of Threatened Species 2012: e.T12436A16711116. <http://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T12436A16711116.en>. Downloaded on **25 October 2016**.

