

**CHEETAH CONSERVATION BOTSWANA
STRATEGIC PLAN
2018-2023**



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PROMOTING COEXISTENCE

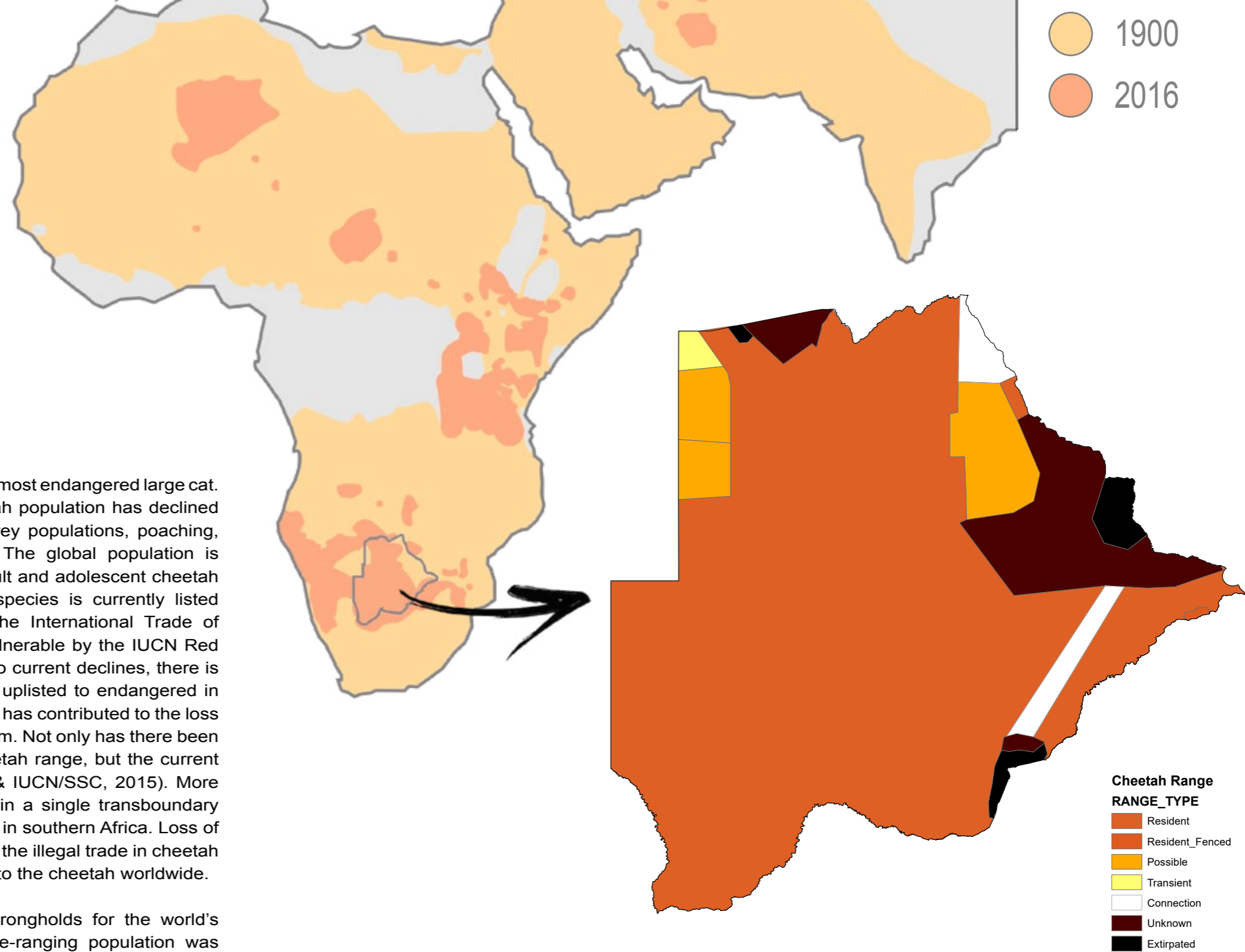


CONTEXT

BACKGROUND

The cheetah (*Acinonyx jubatus*) is Africa's most endangered large cat. Over the past century, the world's cheetah population has declined by 90% due to habitat loss, declining prey populations, poaching, and increasing human wildlife conflict. The global population is tentatively estimated at around 7,100 adult and adolescent cheetah distributed across 33 populations; the species is currently listed as Appendix 1 by the Convention of the International Trade of Endangered Species (CITES) and as Vulnerable by the IUCN Red List (Durant et al., 2017). However, due to current declines, there is strong likelihood that the species will be uplisted to endangered in the next two years. Human encroachment has contributed to the loss of 75% of the area where they used to roam. Not only has there been a considerable contraction in global cheetah range, but the current range is extremely fragmented (RWCP & IUCN/SSC, 2015). More than half of the world's cheetahs occur in a single transboundary population stretching across six countries in southern Africa. Loss of habitat and prey, human persecution¹ and the illegal trade in cheetah and related products remain key threats² to the cheetah worldwide.

Botswana is one of the two primary strongholds for the world's free-ranging cheetahs. In 2015, the free-ranging population was approximated at being 1800-2100 cheetahs representing 30-35% of the estimated global population (RWCP & IUCN/SSC, 2015). In addition, its position on the continent makes the country an important strategic region, providing connectivity between remaining cheetah populations.



90%
of the world's
cheetahs are
already gone.
Time is running
out for the
remaining 7,000.

NATIONAL DISTRIBUTION OF CHEETAH

There are considerable gaps in the information available on wild cheetah in Botswana including reliable information on population size, structure, distribution and behaviour, and their role in carnivore-livestock conflict. This is largely due to difficulty in monitoring cheetah using traditional methods for monitoring carnivores, as they are wide-ranging, elusive and exist in low densities naturally. Despite considerable gaps in information, cheetahs are widespread throughout Botswana, with the highest densities being in the west and south west of the country which is also critically important for habitat connectivity (Weise et al., 2017). Several organisations including the Rangewide Cheetah and Wild Dog Working Group, and the Botswana Carnivore Forum are currently reviewing population numbers and distribution for cheetahs and other large carnivore species.

THREATS TO BOTSWANA'S CHEETAH POPULATION



22%
of farmers will shoot cheetahs even when there is no threat to their livestock

A threats analysis, conducted in 2011 as per the IUCN threats classification scheme and updated in 2016, indicates persecution to be the primary and foremost threat to the nation's cheetah population (Durant et al., 2015). The full threats analysis table can be found in Annex A. Within protected areas (PAs), cheetahs tend to be outcompeted by larger carnivores (e.g. lion *Panthera leo* and spotted hyaena *Crocuta crocuta*) (Durant, 2000). As a result, agricultural areas and Wildlife Management Areas (WMAs)³ outside of national parks and game reserves have become key refuges for the wild cheetah in Botswana. It is estimated that in southern Africa, 77% of cheetahs live outside formally protected areas (Durant et al., 2017). Although the proximity to livestock can lead to conflict with farmers as a result of depredation, it has been demonstrated that with the maintenance of a suitable wild prey base, increased awareness of the benefits of

a healthy ecosystem and the adoption of simple and appropriate livestock husbandry techniques, this conflict can be minimised (Winterbach et al., 2013; McManus et al., 2015). An expansion of human settlements, particularly those undertaking livestock farming activities, and changes in land use, especially within WMAs, are leading to an increase in conflict levels with all large carnivore species (Klein, 2013). This expansion of human development footprint is also resulting in increased fragmentation of wildlife habitat, and a disruption in migratory and dispersal routes essential to maintaining healthy wildlife populations. Along with other factors such as the erection of veterinary fences, drought, poaching and over harvesting of wildlife species, several prey species are on the decline and wildlife is becoming increasingly restricted to formally protected areas (Mbaiwa and Mbaiwa, 2006; Klein, 2007).

Hyper-adapted for speed, cheetahs don't compete well with larger carnivores — meaning they prefer to live outside of protected areas



The majority of Botswana's rural communities depend on livestock farming as their primary source of income generation. Tolerance towards cheetahs and other carnivores is generally low (Selebatso et al., 2008) and retaliatory killings of cheetahs and other threatened carnivores, such as African wild dogs (*Lycaon pictus*), jeopardise already vulnerable populations. In addition, domestic livestock in Botswana is no longer regularly herded, kraaled or guarded and is highly vulnerable to predation (Twyman, 2000). Consequently, livestock is more vulnerable to predation which has economic costs for communities living with cheetahs and other carnivores.

The Botswana government's Problem Animal Control (PAC) incidence reports indicate that cheetah are considered to be a regular problem animal (Klein, 2007; Schiess-Meier et al., 2007). Deliberate and incidental killings as a result of perceived carnivore-livestock conflict⁴ are the foremost cause of mortality amongst the wild

cheetah population in Botswana (Klein, 2007). Improving community methods of livestock protection can aid in decreasing losses to carnivores (McManus et al., 2015). For example, utilising livestock guarding dogs to protect smallstock herds can significantly reduce depredation (Rust et al., 2013; Potgieter et al., 2015). This in turn improves community perceptions, reducing retaliatory killings of carnivores, and ultimately helps secure cheetah populations by reducing livestock losses.

Cheetahs are incredibly wide-ranging, with home ranges exceeding

3,200km²

for non-territorial animals. Because they traverse such large areas, they run a higher risk of encountering threats

BOTSWANA IS HOME TO
25%
OF THE WORLD'S CHEETAHS
MORE THAN ANY OTHER COUNTRY



ENABLING ENVIRONMENT

Since 1968, the cheetah has been classified as royal game or conserved animal under various game laws in Botswana and therefore protected from hunting. The Wildlife Conservation and National Parks Act (1992) classifies cheetahs as a protected carnivore species that may only be hunted or captured in accordance with the terms and conditions of a Director's permit. However, cheetahs can be killed in defence of human life or property, including livestock. In 2005, a statutory instrument was passed which banned the killing of cheetah as a problem animal (Klein, 2007). Despite this, in practice, retaliatory killings still occur and are tolerated by authorities when considered to be in defence of life or property. A government run compensation scheme offers farmers suffering livestock losses due to carnivores some respite from the economic losses borne by conflict. In 1997, the scheme excluded losses by cheetahs but in 2004, both

cheetah and wild dog were added to the list of compensated animals. It was hoped that this would in part increase the tolerance of farmers towards these carnivore species (Klein, 2007). As with most compensation schemes across the world, this issue remains contentious for a number of reasons including the time taken to process claims, the ability to correctly assess the loss as being due to a specific carnivore species, dissatisfaction with the reimbursement amount and the failure of the scheme to promote responsible management by livestock owners (Dickman et al., 2011). Botswana's Community Based Natural Resource Management (CBNRM) Policy of 2007 defines CBNRM as "a development approach that incorporates natural resources conservation", taking cognisance of the fact that those living closest to the natural resources bear the costs associated with conservation of those resources. In order for them to

Big problems need big solutions. And protecting species at a landscape level requires the coordination of numerous stakeholders and policy-makers.

actively and effectively engage in conservation, the benefits of those resources should outweigh their conservation costs. When the policy was first instituted and operationalised, efforts were made to devolve authority with regards to utilisation of natural resources but did not transfer ownership rights of actual resources themselves to any community or individual (Mbaiwa et al., 2008). One objective of the WMA concept was to enable benefits to accrue to local host communities on the basis of sustainable utilisation, and thus grant local communities limited use of resources subject to regulations set by the government such as the need to apply to hunting quotas, adherence to management plans, maximum livestock stocking rates etc. (Twyman, 2000, 2001; Aarntzen, 2003). In order to participate in CBNRM based activities, communities have organised themselves into legal entities such as trusts or Community Based Organisations (CBOs). However, despite early gains, CBNRM in Botswana has suffered some serious setbacks including misappropriation of funds, capacity constraints and high turnover in CBO governance structures, elite capture

within host communities, increasing centralised decision making by government, and an over-emphasis on consumptive use (Monggae, 2014). In 2014, the government instituted a moratorium on hunting which impacted CBOs in terms of the utilisation of resource options available to them. This multitude of factors has compounded to result in waning support from local communities towards wildlife conservation as a land use, as the costs of living with the natural resource base outweighs the current benefits (Mbaiwa, 2017). That is to say, wildlife is considered to be a liability that brings little to no tangible benefits and is perceived to be protected over the rights and well-being of host communities.

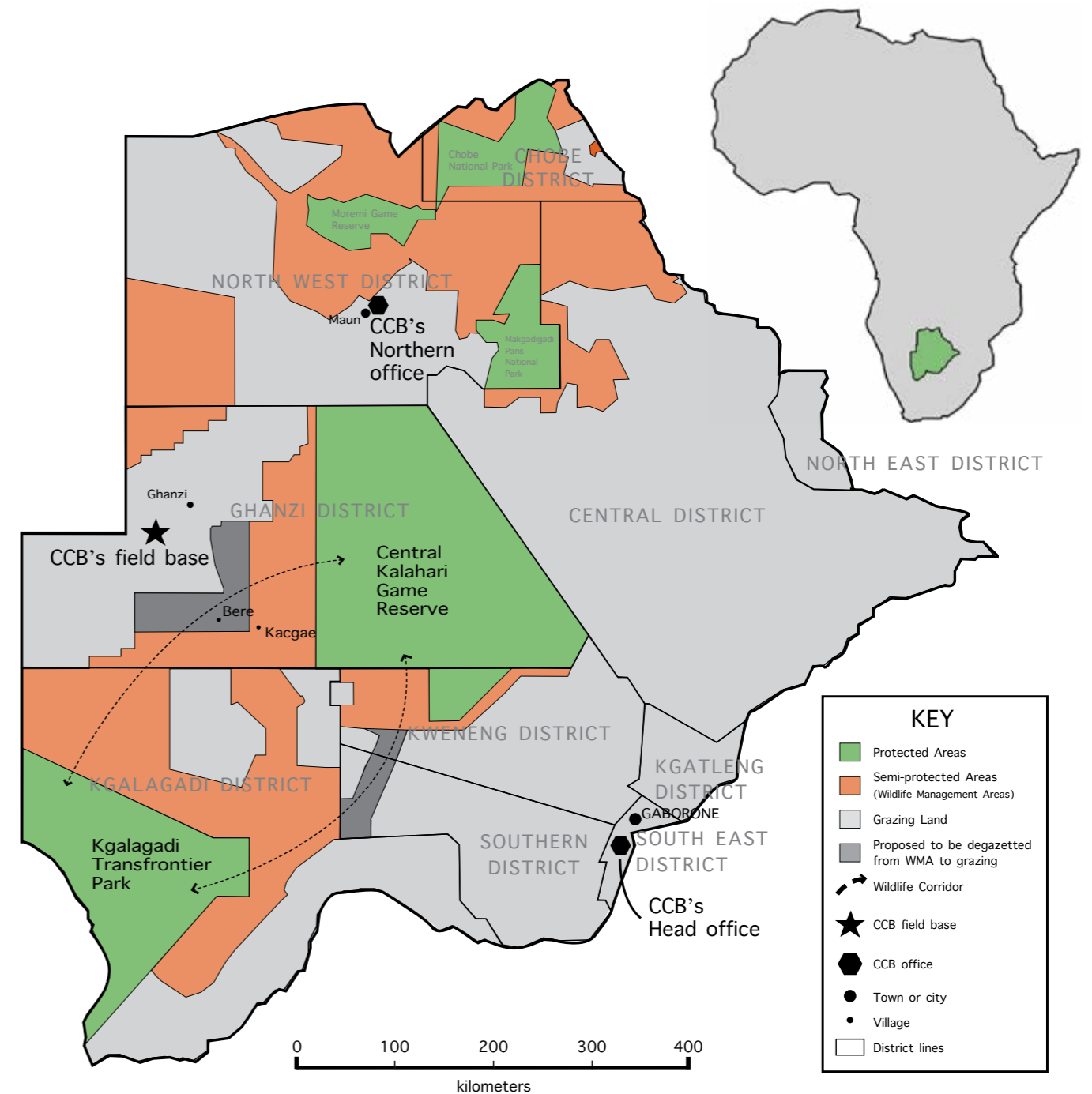


CHEETAH CONSERVATION BOTSWANA

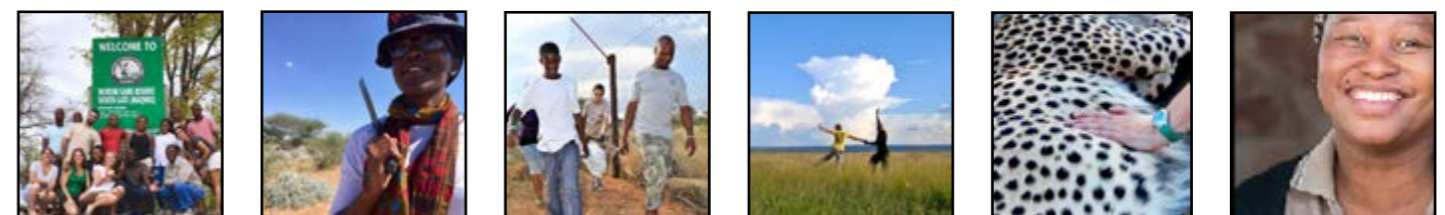
BACKGROUND OF THE ORGANISATION

Cheetah Conservation Botswana (CCB) was established in 2004 aimed at assessing, monitoring and maintaining healthy cheetah populations nationally through scientific research, community outreach and conservation education. It was the presence of two captive cheetah brothers, Duma and Letotse, at Mokolodi Nature Reserve outside Gaborone, brought in when their mother was killed by a farmer in a conflict incident, that first highlighted the plight of the nation's cheetah population. For 10 years thereafter, the organisation ran its operational base from the nature reserve where the brothers served as ambassador cats, offering great educational value to the general public. Initial expansion of the organisation's activities to Jwana Game Park in the southern Kalahari was in order to survey the cheetah population in the reserve. Cheetahs in the area were collared and monitored. 50% of the collared cats were killed on farmlands adjacent to the Park, clearly demonstrating that community outreach and conservation education were required to support farmers to reduce conflict and improve tolerance. In 2008, a research camp was set up in the Ghanzi commercial farmlands based on the high levels of reported conflict from government PAC records (Klein, 2007). This now serves as a base for most of the organisation's research activities, a venue for conservation

education bush camps and farmers' workshops, and has a demonstration farm with smallstock, practising promoted husbandry management techniques. Support is provided to farming communities in the Ghanzi and Jwaneng areas through technical advice, placement of livestock guarding dogs (LGDs), and capacity building workshops. Currently, the organisation has a small but highly committed and dedicated staff complement of 14 full time employees and four interns and volunteers, spread between Gaborone, the Ghanzi farmlands and Maun. The operational headquarters remain in Gaborone, a strategic decision made in cognisance of the relative ease of accessibility to essential facilities and service providers, and close proximity to key stakeholders such as the headquarters of the Department of Wildlife and National Parks (DWNP) and Ministry of Environment, Natural Resources Conservation and Tourism (MENT). In 2016, the Jwaneng base was closed to allow focus on the Western Kalahari, where research has shown the highest populations of cheetahs in the country to reside. A satellite office was opened that same year in Maun to enable closer public engagement and networking with complementary conservation and research organisations, many of which are based in Maun.



PROMOTING COEXISTENCE - SINCE 2003



CHEETAH CONSERVATION BOTSWANA

We have been blessed enough to have achieved a lot in the last 15 years. We are greatly looking forward to the next 15.

ACHIEVEMENTS SINCE INCEPTION

Since inception, CCB has earned itself a reputation of being a reliable partner to both communities and government, offering practical solutions to real challenges reliant on evidence based information.

Through its scientific research programme, collaring of individuals, spoor surveys, prey analysis and camera traps have been utilised as research techniques. Over the years, these have helped to increase information on home range, territory use, interactions between individual cheetahs and coalitions, prey preferences, land use preferences and movement on farmlands. Notably, prey analysis indicates that in Ghanzi, less than 6% of cheetah diet is made up of livestock yet community perceptions are that this number is much higher (Boast et al., 2016). Although most farmers will retaliate towards cheetahs when livestock losses occur, 21% of farmers have reported to indiscriminately shoot carnivores even when no livestock depredation occurs (Horgan, 2015). Home ranges of resident male cheetah are relatively large and individuals and coalitions can traverse over more than 21 farms within their home range (Van der Weyde et al., 2017). Resident males are key to maintaining territories and thereby limit the number of transient individuals in an area. Thus removal of key residents, can potentially exacerbate conflict levels as new transients will move into an area to compete for the territory. Furthermore, camera traps are being used to monitor long-term population trends in cheetah in the Ghanzi farmlands, in addition to showing the high diversity of species, particularly carnivores, that currently co-exist in these non-protected areas and neighbouring WMAs (Van der Weyde et al., 2018).

Translocation is a tool that has frequently been utilised by government wildlife authorities to mitigate antagonism that arises as a result of human-wildlife conflict but the efficacy of this technique remains in contention. CCB has assisted in the translocation of 24 groups of cheetahs since 2004 (49 individuals). By collaring and monitoring 16 of these released cheetah groups, CCB found a meagre 25% survival rate for more than a year post-release (Boast et al., 2015, CCB Unpublished data). CCB has contributed this information towards the development of DWNP's new translocation policy and has subsequently decided it is not worthwhile to engage in translocation exercises.

Through the community outreach programme, community surveys were conducted to gather baseline data on livestock management methods, conflict levels and community perceptions of conflict. Since 2004, approximately 6500 farmers have been reached through site visits, farmers workshops and conflict mitigation interventions. 150 site visits have been conducted in Ghanzi



130
livestock guarding
dog puppies placed
with needy farmers
since 2013

>15,000
kids have been
reached with our
education activities



and Jwaneng to offer support on management techniques and conflict mitigation. Over the same period, 140 farmers workshops were conducted reaching close to 10% of the target population in conjunction with partner organisations such as DWNP, Department of Veterinary Services (DVS), Department of Animal Production (DAP), Botswana Police Services (BPS), Birdlife Botswana, and others to improve knowledge about different predator species, stock safety, rangeland management, conflict mitigation and sound farming techniques. The post workshop evaluation demonstrated that 92% of farmers reported an increase in knowledge.

The Ghanzi field base is located on a wildlife friendly cattle farm run with sustainable management practices including rotational grazing. In addition, CCB has set up a smallstock demonstration farm to showcase responsible management techniques for keeping goats and sheep. These demonstrations are invaluable tools offering practical illustrations of livestock management techniques and conflict mitigation measures promoted through farmers workshops including effective kraaling techniques, use of LGDs, breeding seasons herding strategies and grazing management

One mitigation measure that has been tried, tested and is actively promoted is the use of livestock guarding dogs (LGDs) with smallstock. In Botswana, CCB's interventions have demonstrated that local breed, Tswana puppies work better than pure-breed dogs that are traditionally used for this purpose elsewhere in the region and the world (e.g. Anatolian Shepherds).

For puppies that are placed with smallstock farmers by CCB, initial training of the puppies is conducted at the demonstration farm in Ghanzi along with the veterinary care necessary for their first few months of life. For these and farmers who are already using LGDs, CCB offers supportive veterinary care and technical advice for the duration of the dog's life. Of the total 50 dogs placed since 2015, 80% are performing well and reducing conflict, 12% of the dogs have shown declining performance and 8% have died as a result of snakebites, car accidents and injuries.

The conservation education programme of CCB has reached over 15,000 students across the country through school talks and resident bush camps at the Ghanzi camp which impart knowledge about general environmental issues, ecosystem health, carnivore identification and conservation and livestock management. Results from our bush camp evaluations suggest that 87% of students walk away with a greater knowledge of wildlife and the environment and 90% show a greater empathy towards wildlife. 266 teachers have also been trained and provided with environmental education resources, 83% of which are still using these resources 6-12 months after training.

Through print media articles, scientific publications, radio and television interviews, and setting up of stalls at fairs and public events, the organisation disseminates information to different target audiences including the general public to enhance awareness about conservation and conflict issues.



DEDICATED CONSERVATION



STRATEGIC PLANNING PROCESS

The process of strategic planning is important for any organisation as it allows the organisation to determine where it is going and why. Periodic self-reflection allows for necessary adjustment to ensure that appropriate approaches are taken and resources prudently utilised.

CCB's last strategic plan was prepared for the period 2011-2016. In May 2015, the organisation began to review its operations, approach, achievements, constraints, resources and threats in order to prepare for the next five year period, 2017-2022.

The objectives of the planning process were established as being to:

- Celebrate CCB's achievements to date
- Reflect and revise approaches if required to make CCB more effective and efficient in achieving its goal

The process was conducted over a period of eight months in order to allow for periodic information gathering, processing and sharing which minimised disruption to staff's routine responsibilities, maximised time for reflection, additional input and minimised staff fatigue with the process. It included one-on-one meetings with staff members, group brainstorming sessions, periodic meetings with core management and input from board members. The one-on-one sessions with staff revealed their desire for more direction in organisational interventions, focussed implementation, and evidence to determine the efficacy of interventions. The process of finalisation of the draft plan has entailed consultations with key stakeholder groups in the core project areas.

This document outlines CCB's overall strategic approach, based on an understanding of the broader context in which it functions, its strengths, weaknesses and the problem being addressed. It offers a framework within which to work, clarifying what the organisation aims to achieve and the approaches it will use in order to achieve set goals.



STRATEGIC PLANNING PROCESS

OUR ESSENCE, VALUES AND VISION

OUR ESSENCE

CCB reaffirms being a grassroots conservation organisation which focuses on the conservation of Botswana's cheetahs as a flagship species, by primarily working with farming communities to find realistic solutions that secure both wild cheetah populations and farmers' livelihoods.

OUR VALUES

- Conduct operations and interventions in an ethical, transparent manner abiding by the guiding legal framework of Botswana
- Value and respect the viewpoints of our stakeholders and their contributions
- Be truthful and accurate in internal and external communications
- Be collaborative, recognising that different organisations have different strengths and comparative advantages which can be leveraged for increased impact
- Use the best available science to guide decision making
- Balance idealism with pragmatism
- Be forward thinking and results oriented in planning and implementation
- Be adaptive, evaluating and assessing the impacts of conservation actions and modifying these as required



OUR VISION: A healthy cheetah population nationwide for posterity

The elements of success contained within the vision include:

“Cheetah”

Has been selected as a flagship species, that is, a species that serves as a conservation ambassador. Protecting flagship species enables protection of a large number of other species which may share its habitat or be vulnerable to the same threat. The cheetah as a carnivore species, is also an indicator species for the state of an ecosystem or processes within the ecosystem. Carnivores control the populations of a range of prey species, removing the most ecologically unfit individuals thus ensuring that stronger, fitter, and faster specimens survive (Hairston et al., 1960). Without carnivores, scavenger populations would be affected and a key control mechanism would be absent from prey populations, without which, large prey populations would reproduce beyond the carrying capacity of their environments, over utilising the limited food sources, making them more vulnerable to severe climatic conditions such as droughts (Ripple et al., 2014). The overall result would be a disruption in the ecosystem, causing a domino-like effect pushing populations and habitats beyond the point of recovery.

“Healthy population”

One which is able to efficiently respond to challenges and effectively restore and sustain a state of balance (Deem et al., 2008). Several interacting biological, social and environmental factors contribute to a healthy population of any particular species, creating a capacity for it to cope with change over time which cannot be measured only by the absence of disease but rather by features that affect its vulnerability and resilience to environmental and social disturbances (Stephen, 2014).

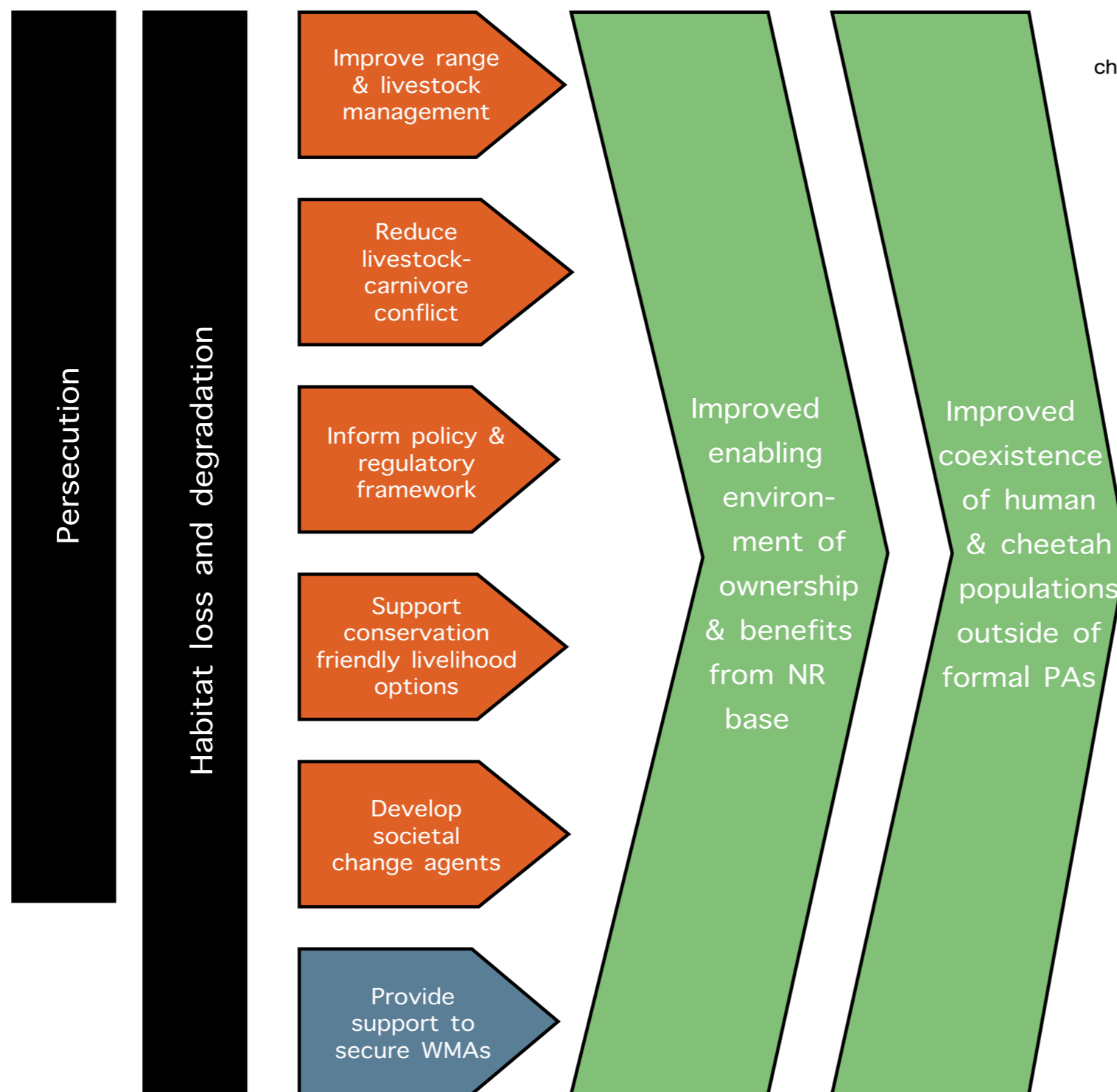
“Nationwide”

While immediate approaches are geographically focussed to specific parts of the country, in the long term, the roll out of successful interventions to other parts of Botswana is expected.

“Posterity”

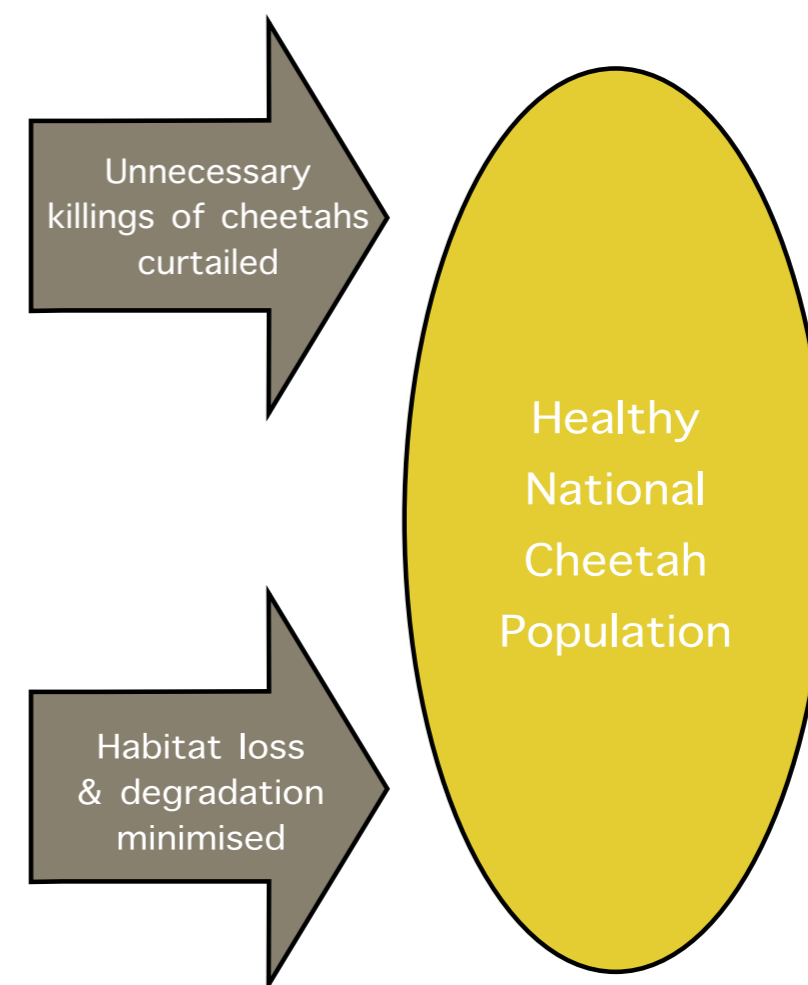
Generations to come, not just the immediate future.

CONSERVATION APPROACH



THEORY OF CHANGE

In order to realise its vision, CCB will focus for the next five year period predominantly on (I) demonstrating successful co-existence of human and cheetah populations outside formal PAs, and (II) promoting an enabling environment for cheetah conservation within Botswana. Achieving these two goals, will contribute towards addressing the two primary threats facing Botswana's cheetah population; (1) deliberate and unnecessary killings of cheetah, and (2) habitat loss and degradation. The Theory of Change is depicted in the figure below, with the full intervention tree being found in Annex B.





GOAL 1:
DEMONSTRATE SUCCESSFUL
COEXISTENCE OF HUMAN
AND CHEETAH POPULATIONS
OUTSIDE OF FORMAL PAs

CONSERVATION APPROACH

GOAL 1: Demonstrate successful coexistence of human and cheetah populations outside of formal PAs

BACKGROUND

From an ecological perspective, agricultural farmlands serve as critical habitat for cheetah in Botswana as they tend to be outcompeted in more formal PAs that hold higher densities of larger carnivore species (Durant, 2000). Despite activities since inception, CCB recognises that conflict with human populations in these farmlands continues to be the predominate cause of mortality within the cheetah population. While there are several definitions of co-existence, the organisation defines it as “a state where conflict exists but within acceptable limits, from a behavioural, perceptual and material context for the human population and from a biological context for the cheetah population” (Linnell, 2013). This definition concedes that some level of conflict will remain. However, the level which can be tolerated by humans without resorting to extreme measures, such as the deliberate killing of carnivores, depends to some extent on the benefits accruing to communities to offset the opportunity costs of living with wildlife. These benefits may be variably defined and may include such things as participation in the decision making processes relating to natural resources over which communities are custodians, direct income generation from conservation related activities, employment, skills and capacity development, development of communal infrastructure and services (such as clinics, roads and schools) using funds from CBNRM activities, and so forth. In this instance, the opportunity costs of losing livestock to carnivores must be offset by a value attached to those species, which need not necessarily be financial in nature.

The organisation acknowledges that there will be instances that necessitate killing carnivores on farmlands, particularly when the livelihoods and lives of farmers and other community members are threatened. Until now, the organisation has engaged in considerable outreach work within farming communities across the country. However, the organisation believes that while it has been promoting co-existence of human and cheetah populations through its various interventions, it must further intensify both the depth and breadth of activities within select communities to categorically demonstrate that coexistence can be realised.

In order to achieve this goal, the organisation adopts the following strategies.

73%
of the world's
cheetahs live outside
of protected areas.

STRATEGY 1.1: Concentrate and intensify interventions within select target areas in the Ghanzi District



Local Tswana dogs are being used as a cheaper and more resilient alternative for livestock guarding



Farmers' networks use community change agents and peer to peer learning to encourage the use of sustainable farming methods

Recognising that both human and financial resources are limited, interventions will be focussed on the (1) commercial ranchlands, and the settlements of (2) Bere and (3) Kacgae in the Ghanzi District. New interventions will be developed to complement those that already exist, addressing various aspects that enable coexistence of human and cheetah populations. Lessons learned and successful coexistence models developed can then be applied elsewhere in the country.

Rationale

The western Kalahari has the highest density of cheetahs and is critically important for habitat connectivity from the southern part of the country from Kgalagadi Transfrontier Park (KTP) through to the central and northern parts of the country and even west into Namibia. The district, particularly the commercial ranchlands, is also known for the highest rate of recorded conflict with carnivores and retaliatory killings. The ranchlands to the north of the settlements, are home to a high density of cheetahs as proven through monitoring at local marking trees and carnivore density estimates. Bere and Kacgae settlements form part of crucial cheetah habitat with known movement between KTP and Central Kalahari Game Reserve (CKGR). Residents of these settlements report conflict with this and other carnivore species, particularly wild dog. By demonstrating coexistence in this focal area, the assumption is that cheetah habitat will be retained, and connectivity secured for the future.

Following over ten years of research activities, a baseline of information is available for the Ghanzi area with regards to cheetah population densities, prey base, behaviour, home range size, resource selection and farmer attitudes towards carnivores. The presence of this baseline allows for the assessment of impact of various interventions on these characteristics over time. Much of this research has been conducted in partnership with the commercial farmers in Ghanzi.

Since 2008, CCB has also been working closely with farmers in the Ghanzi area offering technical support on husbandry practices and conflict mitigation techniques. As a result, the organisation has cultured relationships which can form the basis for supporting further interventions to farming communities in the target areas.

CONSERVATION APPROACH

GOAL 1: Demonstrate successful coexistence of human and cheetah populations outside of formal PAs

STRATEGY 1.2: Support target communities to improve management of their cultural and natural resources

The target communities in Bere and Kacgae settlements have unique strengths, having mastered the art of survival in the most bare, arid and harsh conditions of the Kalahari desert. Their indigenous knowledge of veld products and veld product harvesting, their rich cultural heritage including skills in the creative arts such as music and traditional dance, and craftwork – leather, bead and firework, and their strong foundational understanding of their environment offer great opportunities and potential for development of conservation friendly and tourism related activities. However, the communities are beleaguered by social challenges including alcohol abuse, unemployment, high school dropout rates and a high rate of teenage pregnancies which have locked many within the communities in a cycle of poverty. CCB will work with specialised and experienced partners to support the communities to tap into their strengths, primarily by building the capacity of their conservation based organisations, or community trusts, to improve their ability and willingness to manage their natural resource base.

the Kalahari is home to an array of traditional medicines, herbs and teas, such as the Devil's Claw which is famed for its medicinal properties



Rationale

CCB recognises that those human populations living closest to the natural resource base bear the costs associated with the conservation of those resources. In order for these host communities to fulfil the role of guardians of their natural and cultural resource base, a few things are required, including:

- An understanding and appreciation of the various resources in maintaining ecosystem health and a further understanding of the impact of ecosystem health not just on the future generations of their immediate community, but the broader national, regional and global community.
- Pathways through which these communities can secure livelihoods which includes not just access to monetary and non-monetary income, but access to health care, education, food security, electricity, water and other basic services. Lessons through time and from across the globe have demonstrated that without a means to this kind of security, when locked in a cycle of poverty, then host communities often have no choice but to exploit (or over-exploit as the case might be) the natural resource base.
- The traditional knowledge embedded within host communities needs to be recognised, harnessed and utilised in conservation and sustainable development practices.
- And finally, host communities need to play an integral role in the planning and execution of conservation and sustainable development practices, accruing benefits from the natural resource base on which they often rely for survival. If they are excluded, actively or passively, both conservation and development interventions tend to fail in the long run.



© Doug Gimesy

CONSERVATION APPROACH

GOAL 1: Demonstrate successful coexistence of human and cheetah populations outside of formal PAs

STRATEGY 1.3: Support uptake of effective, sustainable rangeland, livestock and conflict management techniques



86%
of farmers adopted holistic management techniques after attending our farmer workshops — techniques that decrease conflict and improve productivity

Promoting measures which mitigate conflict with carnivores amongst livestock owners remains a critically important strategy. Techniques such as the use of LGDs, kraaling, herding and birthing seasons have been shown to reduce depredation rates. Supporting the uptake of these will continue among the commercial ranchlands and other farming communities in the target area. Additionally, investment into new and innovative mitigation measures is also required. As has become evident over the past decade, the issue of conflict mitigation cannot be divorced from broader livestock and rangeland management and health and therefore, CCB will continue to culture collaborative partnerships with complementary entities and institutions.

Rationale

Research has indicated that 78% of Botswana's cheetah population lives outside of PAs and therefore come into contact with agricultural communities. Persecution from livestock farmers remains the greatest threat to the cheetah population of Botswana and mitigating conflict with farmers remains the most prudent way to help secure the species survival. Conflict mitigation methods promoted by CCB have been shown to reduce depredation rates, which in turn, has led to a reduction in the amount of cheetahs and other carnivores being persecuted. Promoting techniques that not only reduce the likelihood of depredation but also contribute positively to farm and veld productivity are expected to contribute to coexistence by improving livelihoods. When the latter are threatened, farmers are more likely to retaliate aggressively in the wake of livestock depredation.

STRATEGY 1.4: Support development & activities of networks and champions to catalyse action and promote exchange of information & good practice

Farmer networks will be supported and their activities facilitated over time allowing collective intelligence to develop, subsequently transforming into implicit knowledge held by individual members of the network and used to address common challenges. Identification of and support to willing and active champions within these networks and farming communities will further catalyse change.

Rationale

Small scale, smallstock farmers in the target area reportedly face quite similar challenges including issues of animal disease, inadequate or poor quality range, depredation by carnivores, stock theft, drought, inadequate market access and other effects of climate change. Closer cooperation through the establishment of peer networks enables improved transfer of knowledge, sharing of lessons learned, testing of innovative ideas, access to technical expertise and greater support during specifically challenging times.

STRATEGY 1.5: Cultivate youth ambassadors for conservation

A select number of youth with a demonstrable passion for wildlife and the environment will be identified from the target area. They will be guided and supported in their further development through both formal as well as informal education systems. Existing conservation education activities, such as school talks, bush camps, mobile camps and resource provision, which aim to increase knowledge on ecosystem health and services and particularly the role of carnivores, will be utilised as a basis for this strategy. Focussed, long-term support and mentorship will be offered to a select few. The nature of this support will vary on a case by case basis ranging from support to vocational development depending on skills to co-financing for completion of more traditional education paths. This longer term investment in individuals is more likely to affect behaviour change than brief, snapshot interventions. These youth would thereafter serve as ambassadors for conservation within their broader communities.

Rationale

The majority of youth from the target areas do not have access to the resources (financial or otherwise) to cultivate latent or sparked interest in conservation or environmental issues. Bere and Kacgae in particular are beleaguered by a host of social development challenges including high rates of school drop outs, teenage pregnancies and unemployment which further increases the probability of locking youth in a vicious cycle of poverty. By offering this support, not only will it positively contribute to individual personal development but also demonstrate the practical value of conservation friendly activities to their wider communities and hopefully influence local perceptions about wildlife which are moulded by a complex array of factors, including social norms, past experiences, formal and indigenous knowledge systems and economic factors.

GOAL 2:
PROMOTE AN ENABLING
ENVIRONMENT FOR CHEETAH
CONSERVATION IN BOTSWANA



CONSERVATION APPROACH

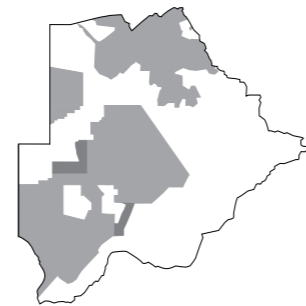
GOAL 2: Promote an enabling environment for cheetah conservation in Botswana

BACKGROUND

The Convention on Biological Diversity defines an enabling environment for protected areas as comprising the “laws, policies, practices and attitudes that govern the society within which a protected area system is based.” Botswana’s national legislation, policies, development plans and strategies provide the overarching framework within which conservation action takes place. It is important to note that it is not only the wildlife and CBNRM acts or policies that are relevant, but all development policies, practices and approaches. For instance, issues of land use and land allocation, impact the existence, preservation or loss of natural habitats for wildlife, connectivity between habitats and the sustenance of essential ecosystem services. Another example might be the erection of fences as part of a country’s disease control policy that can have devastating impacts on migratory wildlife species, subsequently affecting the carnivores that prey on them. All of this of course, impinges directly and indirectly on industries that rely on the natural resource base such as nature-based tourism, cultural tourism, game ranching, craft production, and other associated industries.

Thus, effective conservation of cheetah in Botswana requires a more holistic approach, being aware of other sectoral policies that can support or conflict with conservation policies and working to address specifically those that are in conflict.

39%
of Botswana’s land is protected in some way,
in parks and reserves or as dual-purpose
wildlife management areas



STRATEGY 2.1: Collect & disseminate evidence based information & offer advisory services for consideration in policy design & reform

CCB continues to invest in filling the gaps in information available on wild cheetah in Botswana including reliable information on population size, structure, distribution and behaviour, and their role in carnivore-livestock conflict. Information collected through various research projects is periodically shared with the relevant government authorities, particularly DWNP. Technical advice, based on this information, is offered where appropriate to guide policy, so as to ensure its applicability and relevance to the ground reality. For instance, research conducted by the organisation on translocated “problem” cheetahs was fed into the government’s revised translocation policy in a bid to improve its efficacy when used as a conflict mitigation tool.

Rationale

For a policy to be effective, relevant and applicable, ideally, it should be based on evidence based information. Since its inception, one of the foundational pillars of CCB’s work has been scientific research. It is the information emanating from these studies that forms the basis of its conservation interventions.

STRATEGY 2.2: Establish & nurture multi-disciplinary, strategic partnerships to influence action

Increasingly, there is recognition that there is a need for cross-sectoral, multi-pronged approaches to conservation as the long term threats to wildlife are fundamentally linked to development challenges, such as lack of access to food security, increasing poverty, lack of education and gainful employment, etc. Consequently, the delivery of conservation action in previous sections will be enabled and augmented by establishing and nurturing strategic partnerships with experienced and reliable partners from civil society, academia and private sector.

Rationale

CCB is cognisant of its human resource and skill limitations, but also of its comparative strengths and expertise. By actively seeking out role players with their own strengths and expertise that can be married and used in a complementary manner, a more holistic approach may be implemented towards addressing the base drivers of threats facing cheetah and other carnivore species.

CONSERVATION APPROACH

GOAL 2: Promote an enabling environment for cheetah conservation in Botswana

STRATEGY 2.3: Participate in & facilitate platforms for increased coordination and synergy

There are a number of programmes planned or being implemented southwards in the adjoining Kgalagadi District, northwards in Ngamiland District and to some extent, in the target area. These address, to varying degrees, issues of sustainable land management, improved livestock production and human-wildlife conflict. This is overlain with wider, landscape level conservation and development paradigms such as the Kgalagadi Transfrontier Park in the south and the Kavango Zambezi Transfrontier Conservation Area in the north. There is need for these various programmes to be more coordinated in their approach as more often than not, programme goals are complementary if not similar.

Also, increased coordination between organisations with a similar focus, for instance those working on carnivores, can allow for leveraging of resources (financial, time and human) and knowledge for greater impact. For instance, all carnivore organisations, with facilitation from CCB, under the guidance of DWNP, compiled all available carnivore information nationally in March 2016, identified gaps and how these could best be filled. Outcomes from this included national occupancy maps and the establishment of the Botswana Carnivore Forum, in which CCB still plays a steering role.

Rationale

When experiences from different programmes are shared, they can be used to inform the interventions of other organisations in their own target areas for improved impact. Increased coordination between similar and/or complementary programmes also allows for technical expertise to be tapped into. From the perspective of the target communities, this increased coordination hopefully ensures that there are no mixed/conflicting messages being relayed by different actors in the same field. Further, where there is overlap of project area, it ensures that these target communities are not overwhelmed by consultations, which can lead to fatigue on their part. Finally, increased coordination also lends to a louder, more unified voice to affect change within the enabling environment, particularly with regards to the policy and legislative frameworks guiding conservation and development action.

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International, regional and Botswana-based organisations that CCB is engaged with

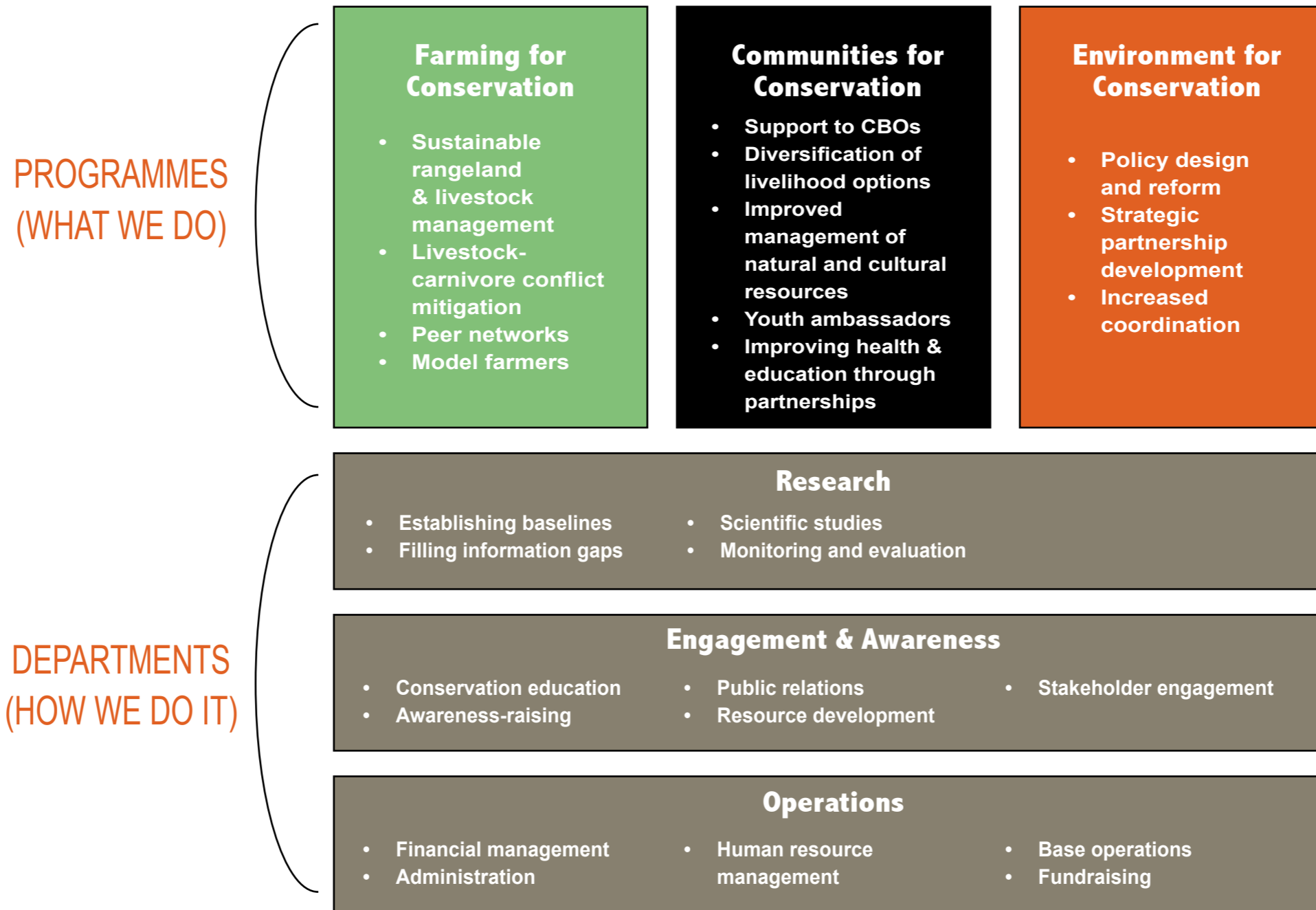
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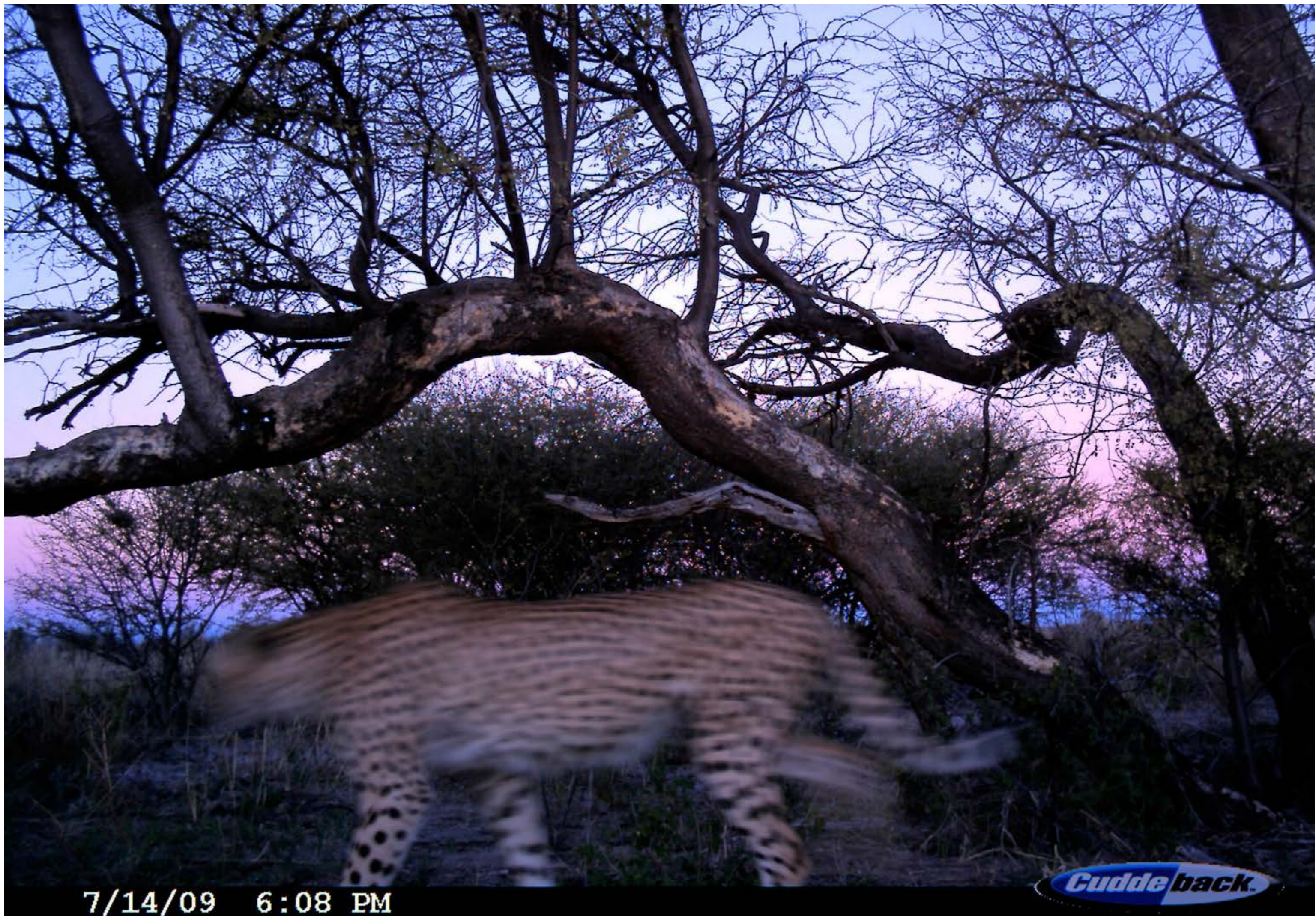


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CONSERVATION APPROACH

HOW WE DO WHAT WE DO





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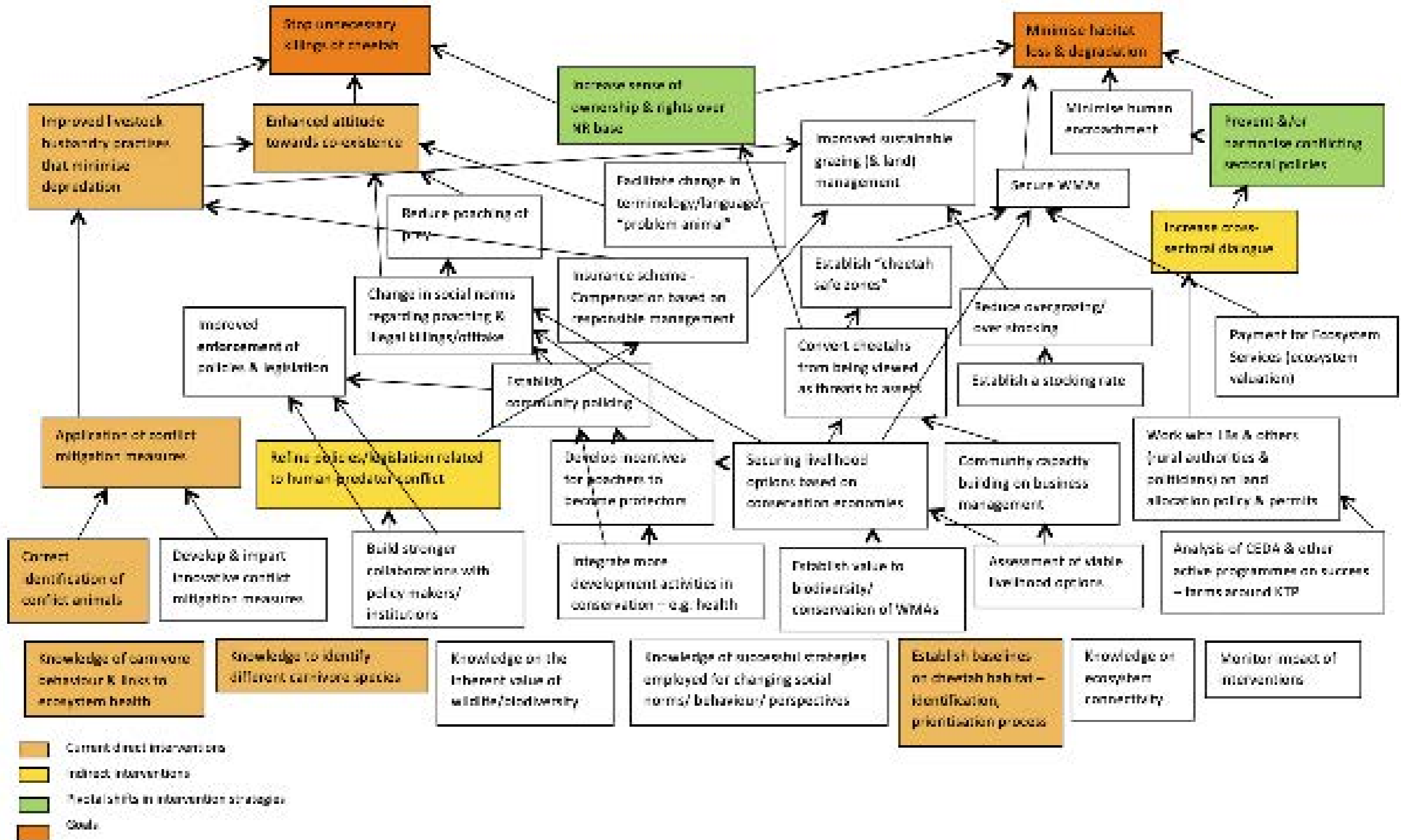
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END NOTES

- ¹ Persecution is understood as being the deliberate unfair/cruel treatment or killing of animals
- ² A direct threat is classified as being any proximate human activities or processes that have impacted, are impacting, or may impact the status of the taxon being assessed – IUCN Threats Classification Scheme, version 3.2
- ⁴ WMAs are communal areas on which wildlife utilisation is recognised as the primary land use, historically, either in a consumptive or non-consumptive manner. WMAs are primary areas where Community Based Natural Resource Management (CBNRM) is practised in Botswana
- ⁵ "Human-wildlife conflict occurs when the needs and behavior of wildlife impact negatively on the goals of humans or when the goals of humans negatively impact the needs of wildlife. These conflicts may result when wildlife damage crops, injure or kill domestic animals, threaten or kill people" (World Parks Congress Recommendation, 2004).

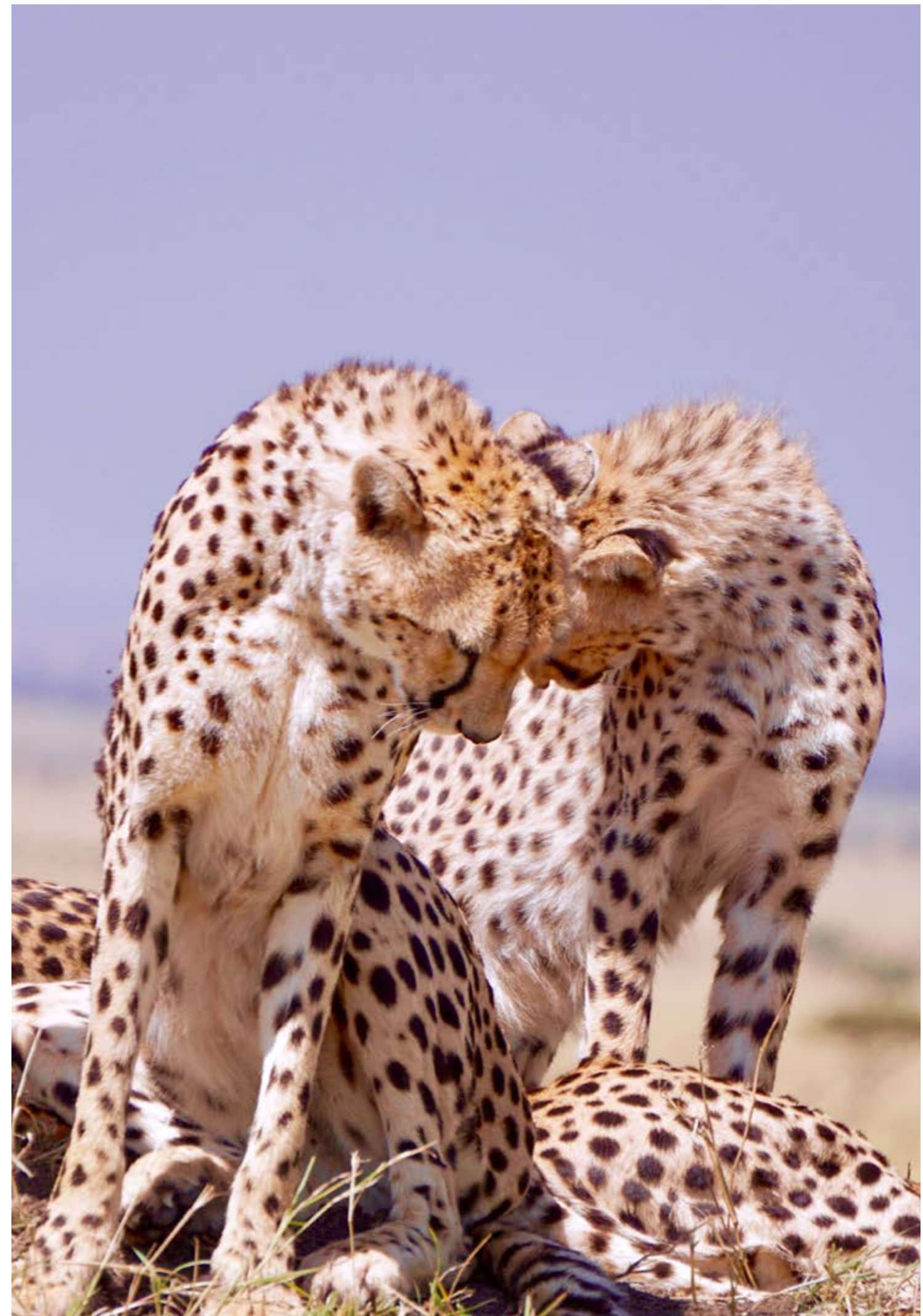
ANNEX A: INTERVENTION TREE

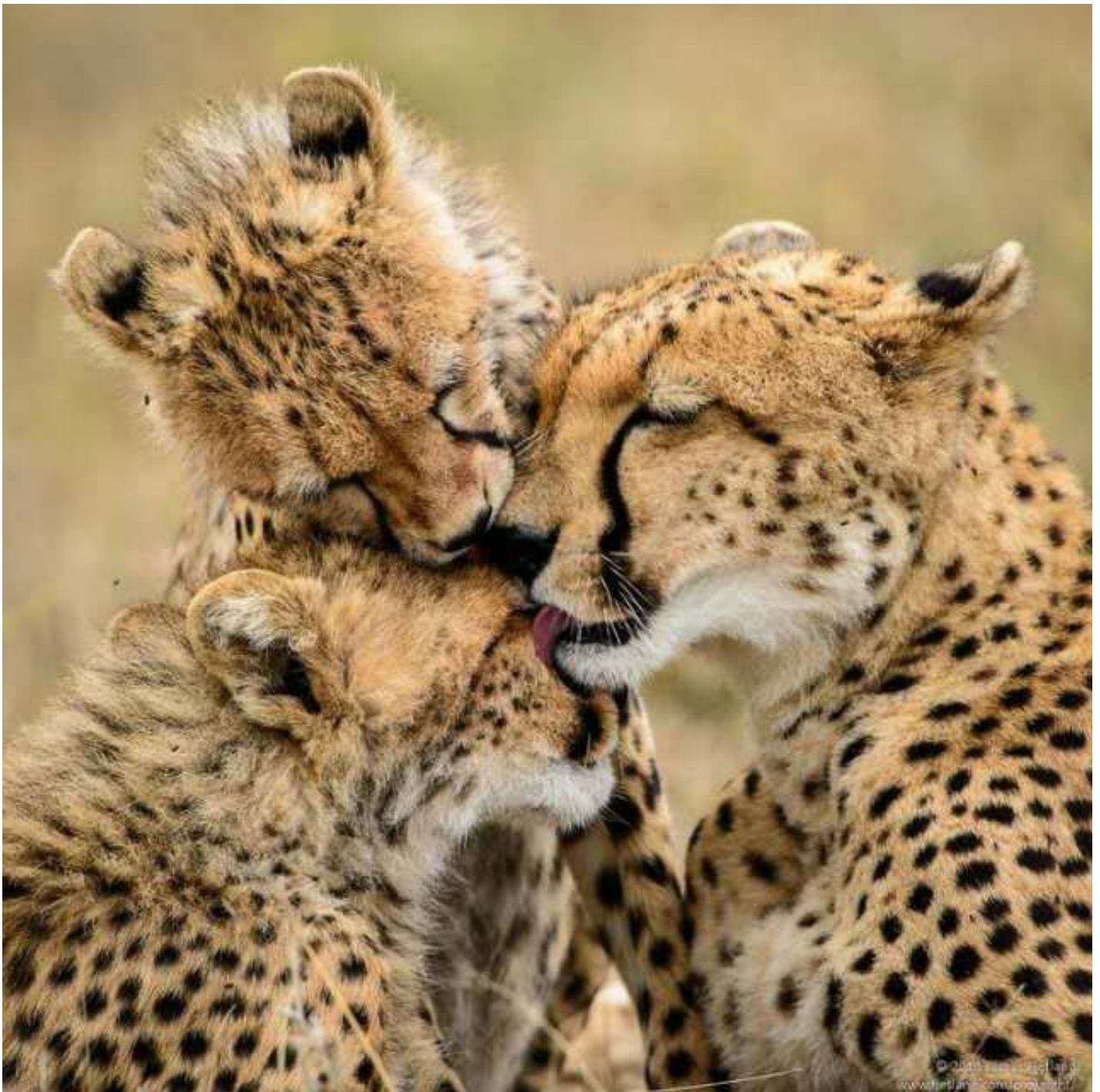


ANNEX B: THREAT ANALYSIS

The cheetah population in Botswana is faced with the following threats, with the ranking estimated after consideration of the severity, scope and irreversibility posed by each considered threat:

Ranking	Threat	Comments
1	Persecution	Deliberate killings due to high perceived levels of conflict
2	Habitat loss & degradation	Due to anthropogenic activities and increasing population size
3	Competition with other carnivores	Largely felt in protected areas, forcing cheetahs to live outside formally PAs in close proximity with human populations
4	Policy environment	Current suspension on hunting in Botswana is adversely affecting attitudes of local communities towards wildlife resources
5	Poaching and illegal trade in cheetah & cheetah products	Live cheetahs and cheetah products are illegally exported across the border. The exact numbers are unknown but it is suspected to be increasing.
6	Genetic diversity	Cheetahs survived a population crash more than 12,000 years ago that led to inbreeding and a loss of genetic diversity. As a result, modern cheetahs may be prone to disease and have poor sperm quality.
7	Climate change	Temperature increases are predicted for arid regions with projected increase in erratic and severe weather patterns including droughts. This is likely to affect prey populations of cheetahs





PROMOTING COEXISTENCE