

First Range State Meeting of the Joint CMS-CITES African Carnivores Initiative (ACI)
5-8 November, Bonn, Germany

Roadmap for the Conservation
of the Leopard in Africa

DRAFT Version 1.0 – October 2018



Compilation of available information on the status of the leopard *Panthera pardus* in Africa, review of threats and a proposal for a conservation programme in the frame of the joint CITES-CMS African Carnivore Initiative.

CMS & CITES Logos?



**Content and purpose of the
Roadmap for the Conservation
of the Leopard in Africa**

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1. Introduction

- Leopard has been on Appendix I of CITES since 1975
- Since 2017 leopard has been listed on Appendix II of CMS
- For ACI, CMS Secretariat commissioned IUCN SSC Cat SG to draft

Roadmap for the Conservation of the Leopard in Africa

- Submitted for review and discussion on CMS CITES African Carnivores Initiative meeting Bonn 5–8 November 2018
- Finalisation of Roadmap until December 2018 for submission for CITES CoP18 (?)





1. Introduction

- Leopard has wide distribution and broad ecological niche
- Top predator playing important role in ecosystems
- Flagship species for conservation of prey populations and habitats in many areas

But:

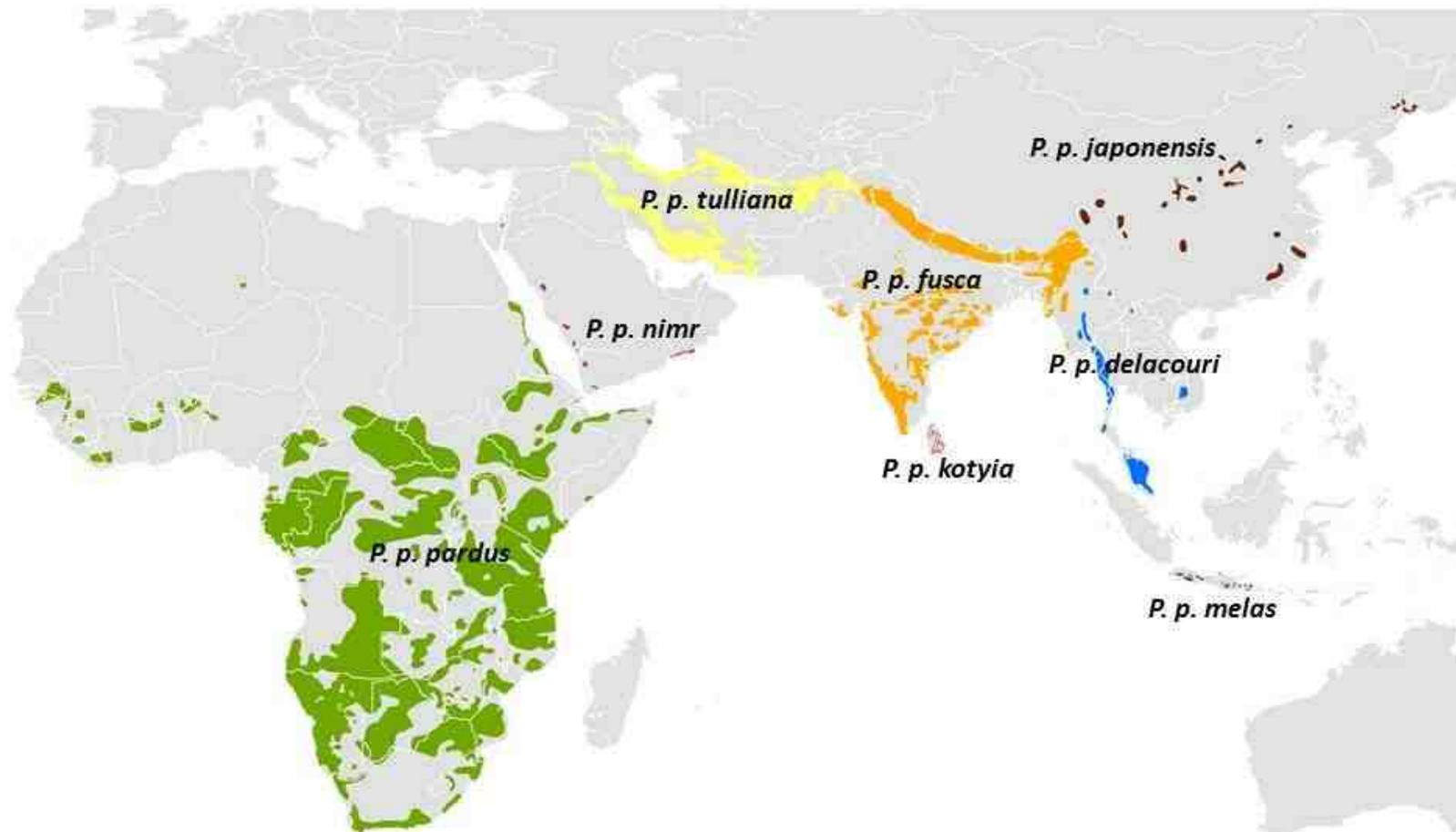
- Smaller distribution and abundance than expected for a long time...
- Fast population decline and range increasing fragmentation in large parts of range
- Considerable gaps in data and understanding
- Neglected species (compared to other large felids)





1.1 Taxonomy

- Eight leopard subspecies (Kitchener et al. 2017)
- Further research needed to clarify taxonomic status in Africa



Leopard distribution including extant and possibly extant range (Jacobson et al. 2016). Leopard subspecies according to Kitchener et al. (2017).



1.2 IUCN Red List Assessment of the leopard 2016



- Declining throughout most of its range
- Population trend: **decreasing** ↓

Population reduction of over $\geq 30\%$ inferred over the last 3 generations based on recently observed distribution range decline and potential levels of exploitation

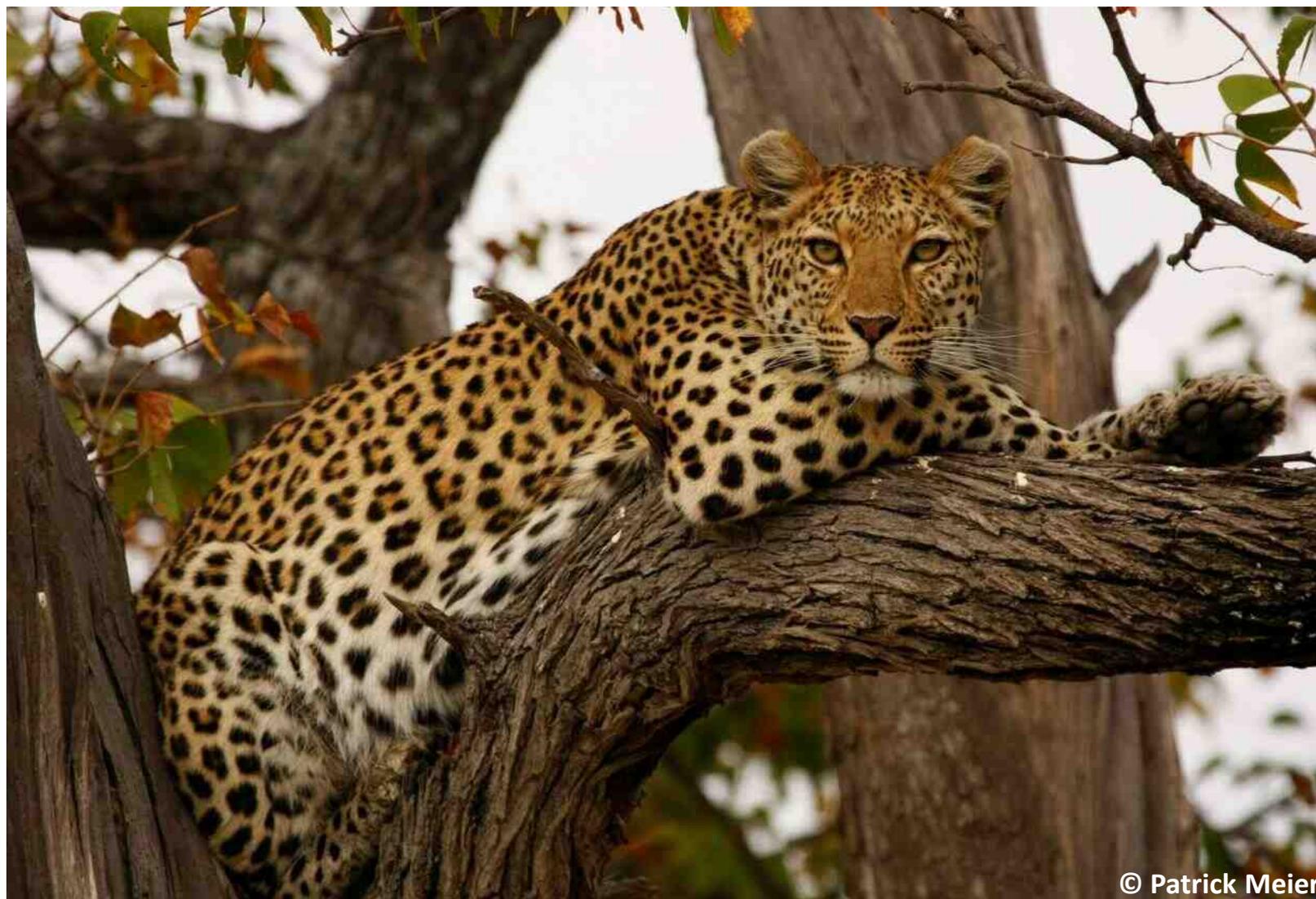
Vulnerable (species)



Endangered or Critically Endangered (several subspecies)



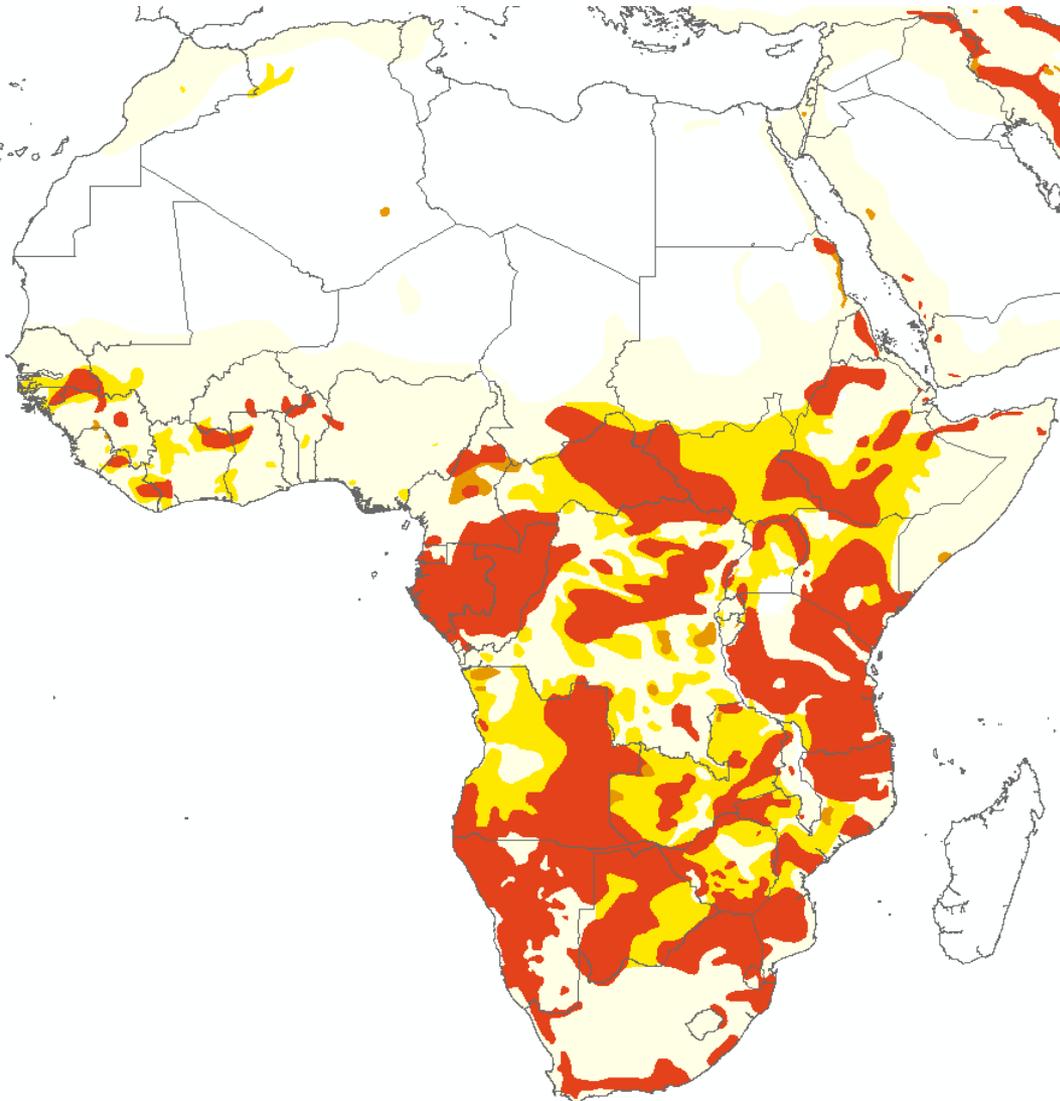
2. Conservation status of the leopard in Africa



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2.1 Distribution in Africa



- Historic range loss in Africa: 48–67%
- Distribution not fully understood
- Recent range declines observed
- Population status often not known, but fast local declines observed
- Many transboundary populations
- Status of the leopard seems worsening

Leopard distribution. Extant range = red, Possibly extant range = orange, yellow = possibly extinct, light yellow = extinct (IUCN Red List of Threatened Species 2018)





2.1.1 Conservation units

Considerations

- Subspecies classification
- Phylogenetic and ecological features
- Existing conservation strategies and conservation efforts
- Shared cultural (e.g. language) and geographic factors
- Example of conservation units defined for wild dog and cheetah

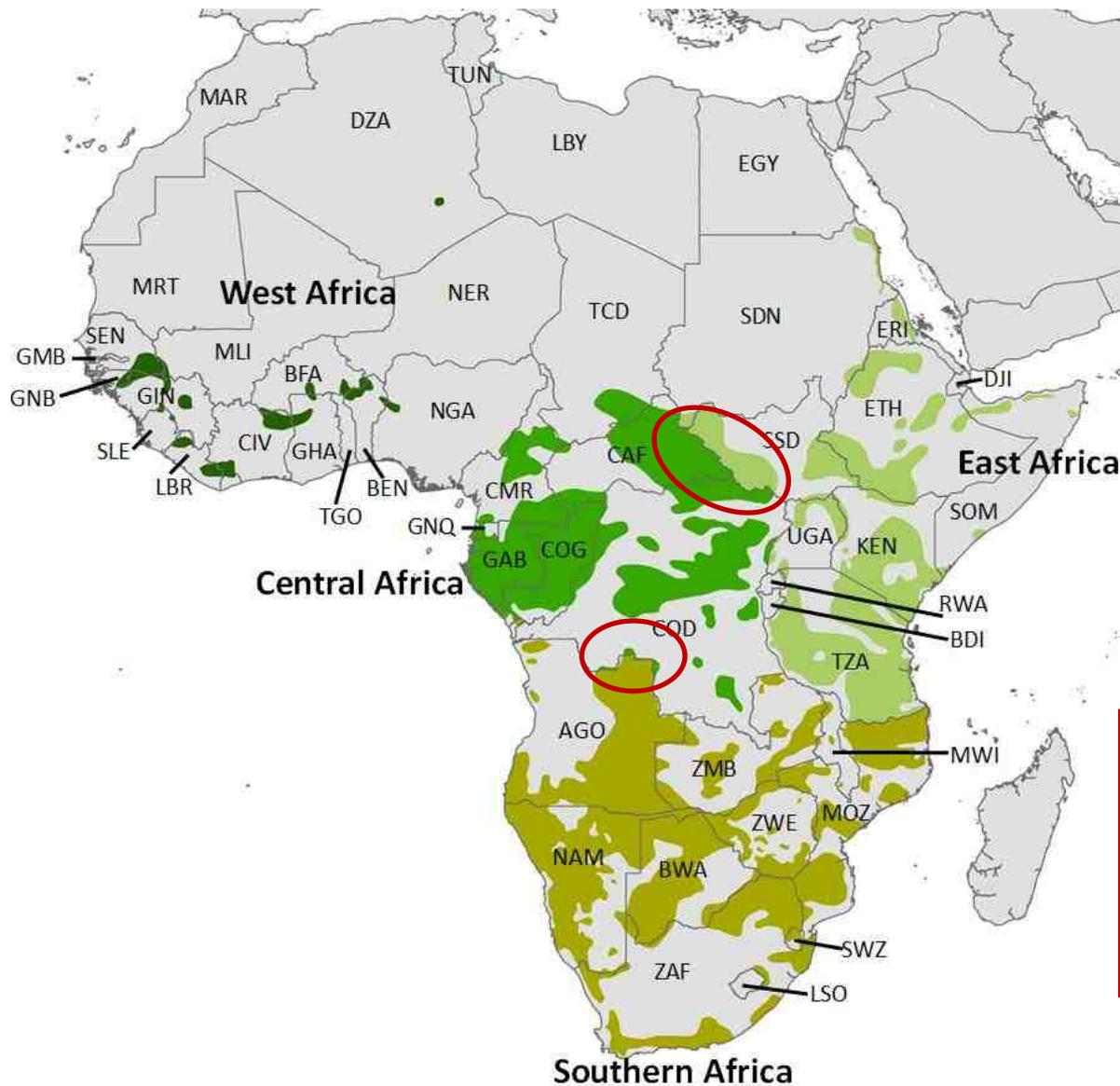
Advantages

- Allows developing specific and effective Regional Conservation Strategies RCS (and subsequent National Action Plans NAPs)
- Facilitate transboundary cooperation
- Informed by conservation framework





2.1.1 Suggested conservation units for leopard in Africa



For debate: Delineation for practical reasons along international borders, not according to population distribution



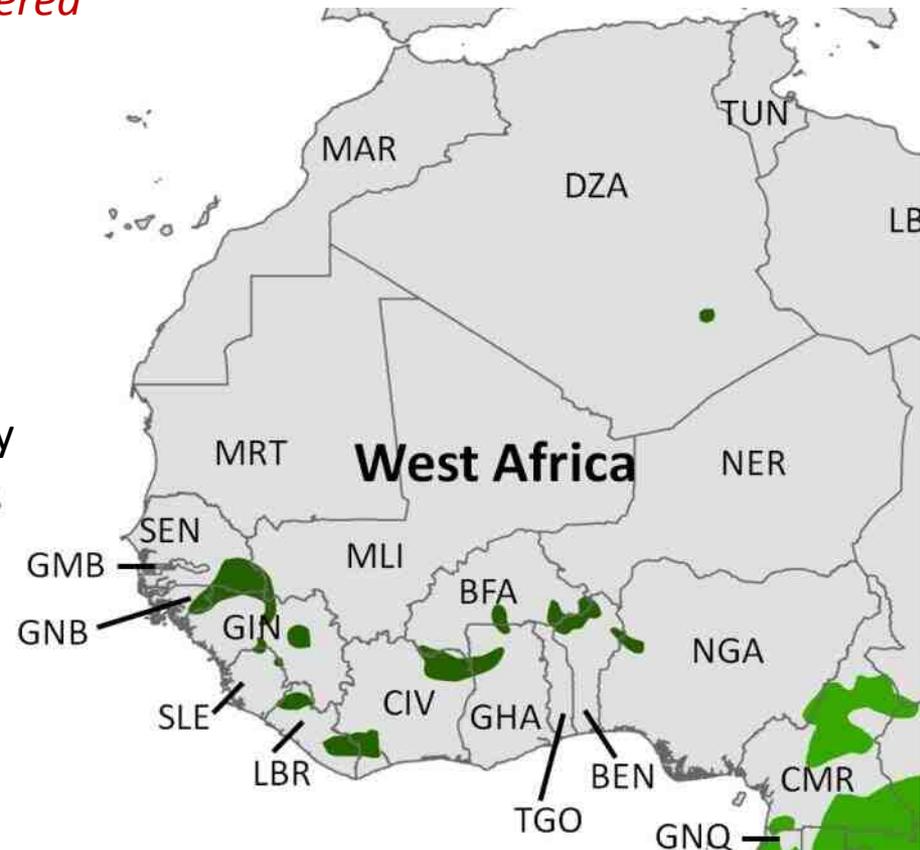


2.2 Leopard population status, estimations and trends per conservation unit

- Last Africa-wide population estimate in 1988
- Sub-Sahara: proposed *Vulnerable*
- North Africa: proposed *Critically Endangered*

West Africa

- Historic range loss: 86–95%
- Rare likely due to lack of prey!
- Resident populations outside PAs unlikely
- Possibly extinct in the Gambia
- Extinct in Mauritania and Togo
- Presence uncertain in Algeria

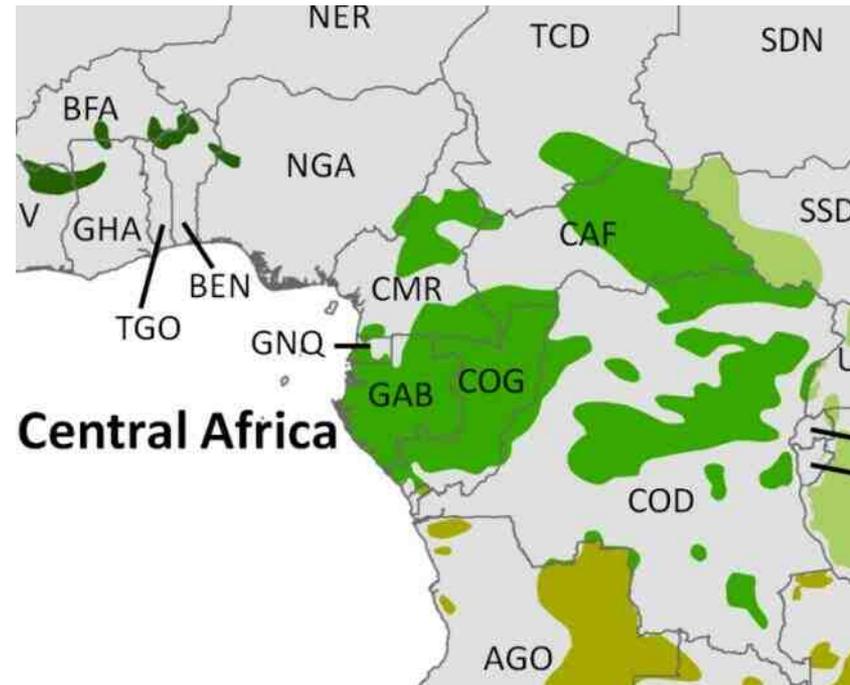




2.2 Leopard population status, estimations and trends per conservation unit

Central Africa

- Historic range loss: 45–66%
- Wide distribution
- Absent or unconfirmed records only in large patches
- Range highly reduced in areas of increased human influence and easily accessible areas → prone to illegal hunting
- Extant in all countries



Central Africa

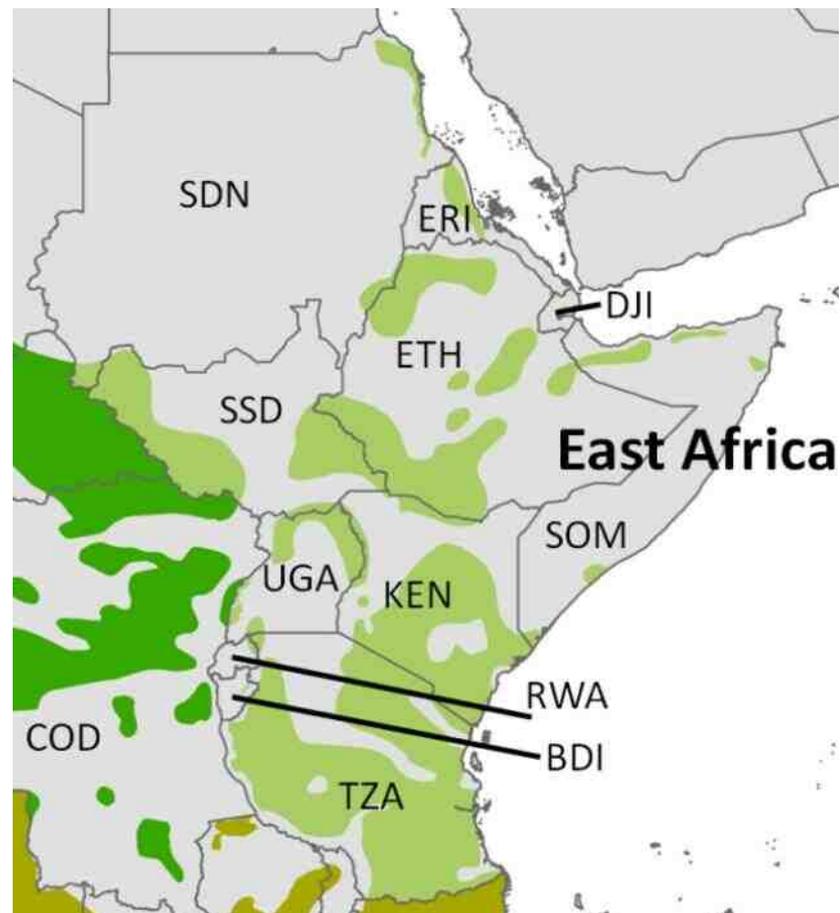




2.2 Leopard population status, estimations and trends per conservation unit

East Africa

- Historic range loss: 45–60%
- Range notably reduced in Somalia, Kenya, Ethiopia and central Tanzania
- Extant in all countries

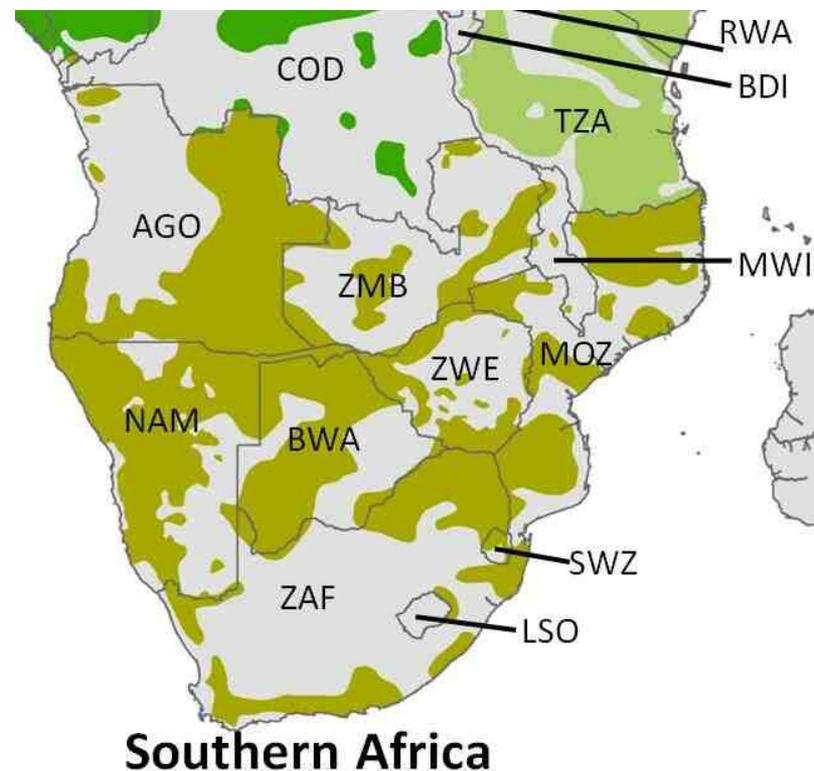




2.2 Leopard population status, estimations and trends per conservation unit

Southern Africa

- Historic range loss: 28–51%
- Disappearing from areas of increased human development and of intensive human-leopard conflict
- Healthy populations outside human-dominated areas
- Possibly extant in Lesotho





2.3 Use and trade

- Since 1975 on CITES Appendix I
- Considerably less hunting permits per year allocated than CITES quota
- Consumptive use beside trophy hunting (e.g. cultural use) little known

Table. Countries where trophy hunting of leopards is/was banned by the national governments.

Country \ Year	Start/Duration
Botswana	Since 2013
Kenya	Since 1977
Malawi	?
Namibia	2010
South Africa	Since 2016
Tanzania	1973–1978
Zambia	2013–2015

Table. Annual CITES quotas allocated for African countries permitted to export leopard trophies and/or skins for 2017.

Country \ Year	2017
Botswana	130
Central African Republic	40
Democratic Republic of the Congo	5 ¹
Ethiopia	50 ² , 500
Gabon	-
Kenya	80
Malawi	50
Mozambique	120
Namibia	250
South Africa	150
Tanzania	500
Uganda	28
Zambia	300
Zimbabwe	500

¹skins, ²trophies





2.4 Threats

Habitat loss and fragmentation

Main causes

- Habitat conversion into agricultural land
 - Increasing livestock herds/numbers
 - Uncontrolled burning
 - Deforestation and
 - Human encroachment
- Impacts prey species → increased conflict potential → direct persecution of leopards
 - Human population in Africa projected to double between 2010 and 2050
 - Area of cultivated land projected to increase by $\approx 21\%$ between 2005 and 2050





2.4 Threats

Prey depletion

- Herbivore populations highly declined in East and West Africa
- Demand for bushmeat is increasing → prey species widely hunted for bushmeat trade
- “*empty forest syndrom*” in parts of West and Central Africa
- Bushmeat market in Congo Basin may negatively affects leopards
- Unsustainable bushmeat trade also in savannas
- Prey depletion is a complex issue involving many factors
- Variety of measures at different levels needed





2.4 Threats

Human-leopard conflict

- Widespread across Africa
- Killing of predators in protection of life or property is legal in many countries
- Mainly due to livestock predation
- In southern Africa additionally due to game predation
- Frequent retaliation killing by poisoning, spearing or shooting
- Extent of leopard mortality due to persecution and conflict unknown





2.4 Threats

Illegal killing

- Illegal snaring of wildlife is rampant
- Snaring can lead to prey collapse and directly affects leopards
- Impact of snaring on leopard populations not quantified yet
- Direct poaching for the wildlife trade (regional and global use!)
- Leopard skins and body parts used in traditional medicine and for cultural purposes
- Indications that leopards from Africa enter trade in Asia (tiger substitutes)
- **Magnitude of illegal killing & trade vastly unknown!**





Trophy hunting

A management tool with potential to help or to harm...

- Potential to be beneficial to conservation if ...
 - sustainable (science-based intervention)
 - well-managed
 - non-detrimental
 - providing economic benefits to local communities (acceptance)
- Potential to be harmful to populations if...
 - additive to other mortality causes (→ risk to be harmful in spite of moderate offtake)
 - intervention (e.g. quotas and delineation of permits) based on poor data or erroneous assumptions
 - local people not sufficiently/adequately integrated





2.5 Monitoring, research and conservation

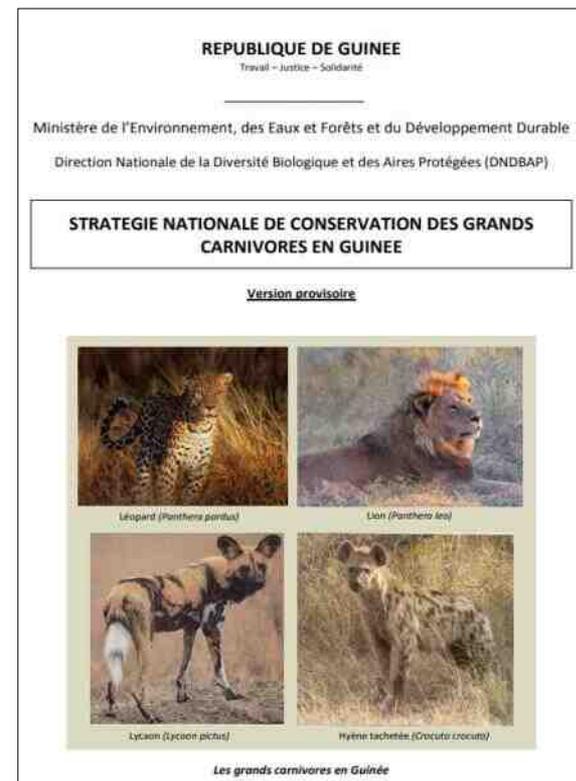
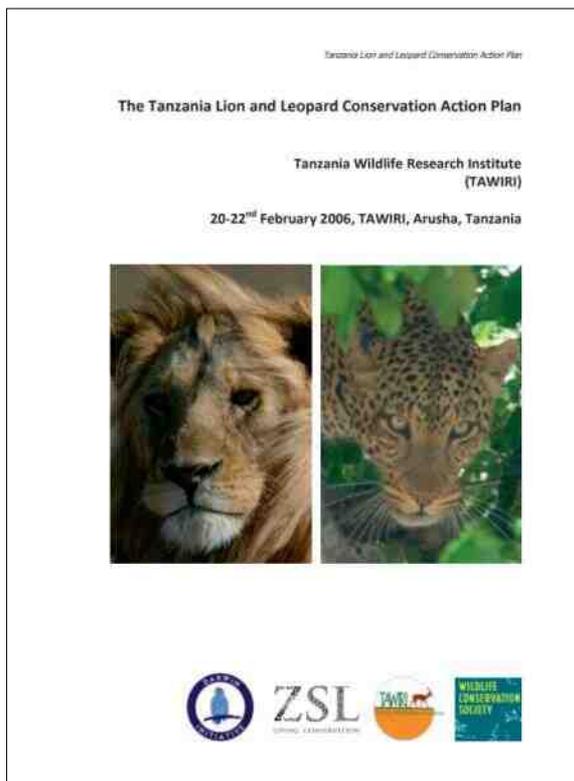
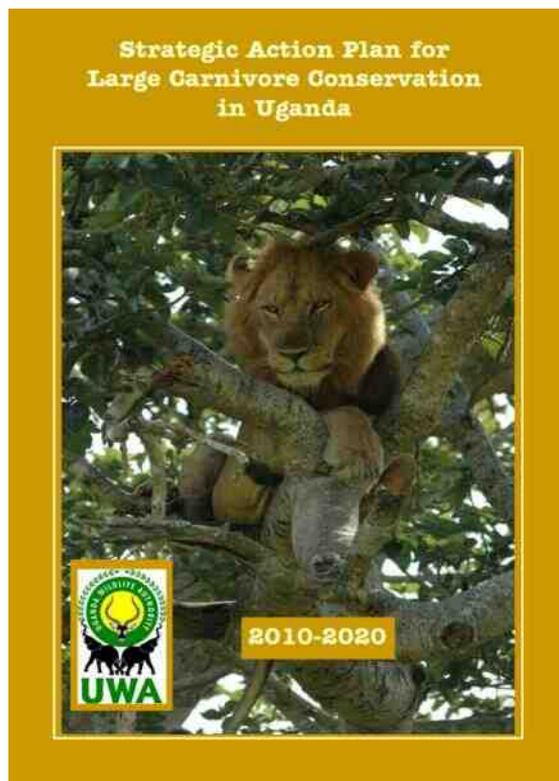
- Robust monitoring of leopard populations restricted to small areas (e.g. study areas)
 - Projects mainly on local populations conducted in several PAs or GMAs
 - No standardised, comparable approach
 - Especially little research in Central, East and West Africa
-
- Consistent monitoring is crucial for realistic population status assessment
 - Initial survey to set baseline for monitoring is needed where information on leopards is limited
 - Recent efforts improving monitoring leopards





2.6 Gaps in knowledge and conservation challenges

- Very few population status assessments and action plans
- No range-wide nor any Regional Conservation Strategy
- So far only 3 Action Plans including leopards

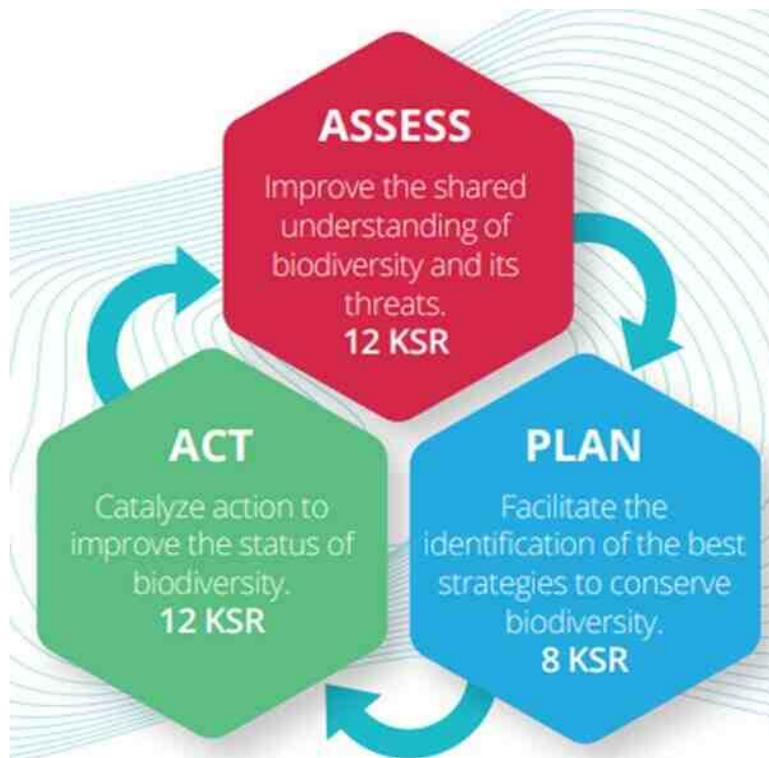




3 Recommendations

Strategic planning for leopard conservation

- IUCN recommendations for strategic planning in species conservation
- Adaptive Process!



IUCN's Assess-Plan-Act cycle (IUCN SSC 2017). KSR are Key Species Results as defined by the Species Survival Commission.

ASSESS

- Situation analysis
- Identification of key stakeholders, potential actors and partners

PLAN

- Strategic planning at range-wide or regional or transboundary level
- Development of NAPs

ACT

- Implementation of Strategy and NAPs
- Monitoring of effects of interventions





3 Recommendations

Steps towards a leopard conservation programme:

1. **ASSESS: *Setting the context and reviewing the state of knowledge***
 - Roadmap: preliminary review of “available information”
 - Produce detailed Status Review for each Conservation Unit

2. **PLAN: *Develop Regional Conservation Strategies and (National) Action Plans***
 - Development of RCS according to the IUCN Guidelines
 - Development of NAPs with concrete actions for respective country

3. **ACT: *Implement conservation actions and monitor their effects***
 - Implementation of RCS and NAPs activities
 - Monitoring leopard populations and effect of interventions

4. **RE-ASSESS: *Review RCS and NAPs and adapt the conservation activities***
 - Regular reporting and meetings to track progress
 - Adaptive process informed by good monitoring and reporting





3 Recommendations

Suggested Objectives to be addressed for the conservation of the leopard:

Objective 1.

Strategic planning for leopard conservation at range-wide, regional and national level:

To develop, in a participatory process, a range-wide conservation plan (e.g. this Roadmap), Regional Conservation Strategies and National Action Plans for the implementation of conservation measures.

Objective 2.

Baseline surveys: To survey and assess, for leopard regions with low level of knowledge, conservation status of leopards and their prey, threats, human attitudes and enabling conditions.

Objective 3.

Monitoring: To establish a long-term monitoring scheme for leopards and implement it in the Range Countries to enable effective adaptive management of the species and assess population trend at a national/regional scale (populations and metapopulations).





3 Recommendations

Objective 4.

Conflicts and coexistence: To promote coexistence with leopards through reducing and mitigating human-leopard conflicts.

Objective 5.

Trophy hunting: To ensure that trophy hunting is sustainable and fosters conservation of leopards.

Objective 6.

Poaching of leopards and prey: To stop leopard population decline by increasing protection.

Objective 7.

Trade: To stop illegal trade of leopards at national and international levels.





3 Recommendations

Objective 8.

Prey base conservation: To secure and enhance wild leopard prey populations through sustainable wildlife management.

Objective 9.

Habitat protection: To stop and reverse destruction and fragmentation of habitat of leopard and their prey.

Objective 10.

Capacity development: To assemble and deliver training to practitioners that enables leopard conservation.

Objective 11.

Leopard partnership: To identify and foster partnerships at global and regional level for leopard conservation.



Conclusions



Joint African Carnivore Initiative of CITES and CMS (with cooperation of the IUCN) offers chance to address large-scale conservation of the leopard



Thank you!

