Convention on the Conservation of Migratory Species of Wild Animals

First Range State Meeting for the Persian Leopard

Tbilisi, Georgia, 20 – 22 September 2022

BACKGROUND INFORMATION ON THE DEVELOPMENT OF A DRAFT RANGE-WIDE CONSERVATION STRATEGY FOR THE PERSIAN LEOPARD

Summary: This background information document explains the methodology used to create a draft Range-wide Conservation Strategy for the Persian Leopard (UNEP/CMS/PL-RS1/Doc.2). The draft strategy was prepared by a group of experts, led by the IUCN Cat Specialist Group co-chairs on behalf of the CMS Secretariat. This work was completed in the framework of the cooperation between the CMS Secretariat and the German Federal Agency for Nature Conservation (BfN) and funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection. The views expressed herein are those of the authors and do not necessarily reflect official opinions of the involved institutions. A revision of this document was prepared to correctly refer to the authors of the document.

Action requested: review the background information, as necessary to understand Draft Range-Wide Conservation Strategy for the Persian Leopard.

TABLE OF CONTENTS

1. Introduction

The Central Asian Mammals Initiative (CAMI) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and its Programme of Work (POW) were adopted by the CMS Conference of the Parties at its 11th meeting (COP11) in 2014 by Resolution 11.24 to enhance conservation of Central Asian migratory mammals. CMS COP13 revised the POW (Resolution 11.24 (Rev. COP13) for the period 2021-2026 by*, inter alia*, adding the Persian Leopard to the Initiative, as proposed by the Islamic Republic of Iran. Activity 19.1 of the CAMI POW 2021-2026, calls upon the CMS Secretariat and Range States to: *Develop a range-wide strategy for the conservation of the Persian Leopard (inclusive of other non-CAMI Range States, i.e., Armenia, Azerbaijan, Georgia, Iraq and Turkey) and update national strategies and conservation action plans*. The activity was given a high priority by the CAMI Range States.

To support the CAMI Range States in developing the Conservation Strategy, the CMS Secretariat and BfN commissioned the development of a draft strategy by the IUCN Cat Specialist Group (SG). In the course of this work, information on the status of the Persian Leopard and its conservation across its range was compiled to inform the drafting process. The Conservation Strategy was developed in a series of online workshops facilitated by the IUCN SSC Cat SG co-chairs, and attended by experts from all Persian Leopard Range States and international experts (see Appendix I for a full list of contributors).

2. Procedures for the development of the Conservation Strategy

2.1. Conceptual background

The development of the Conservation Strategy followed the IUCN Guidelines for Species Conservation Planning (IUCN SSC Species Conservation Planning Sub-Committee 2017) and, more specifically, the Strategic Planning Cycle (Figure 2.1) as explained in the Cat SG's Cat Conservation Compendium (Breitenmoser et al. 2015).
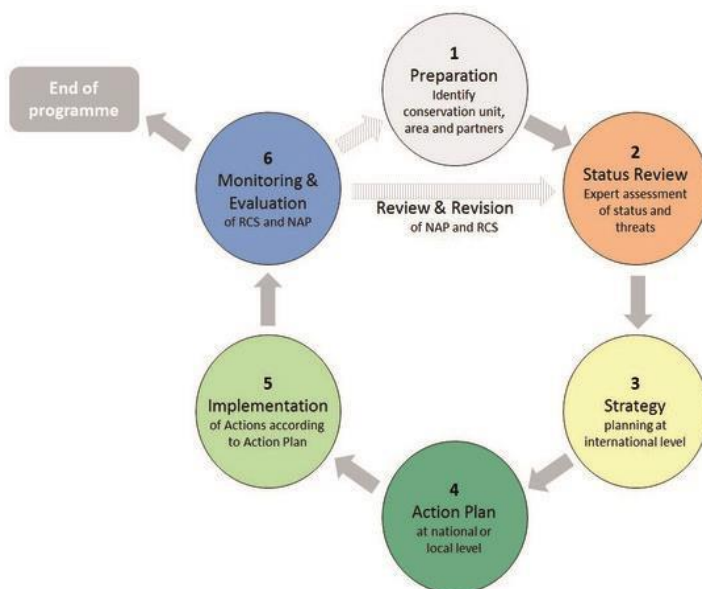

Figure 2.1. The Strategic Planning Cycle. The preparatory steps (Points 1 and 2) are important for sensible planning, which is the first step to successful conservation. The actual planning process (done in participatory workshops) is covered by Points 3 and 4. The ultimate goal of the whole procedure is the implementation of conservation actions (Point 5), but these will only be successful if properly planned and subsequently monitored and evaluated (Point 6). The purpose of the whole participatory process is not to have a plan but the effective implementation of conservation measures. This circle implies that conservation is an adaptive process (Breitenmoser et al. 2015). RCS stands for Regional Conservation Strategy.

First, the conservation status and the state of knowledge on Persian Leopard was reviewed by experts from the Range States. This work was facilitated by online meetings and electronic communication. The distribution range of the Persian Leopard was split into four regions/metapopulations (see UNEP/CMS/PL-RS1/Inf.2) with one status report being produced per region. These status reports were published as a Cat News Special Issue together with the topical chapters and served as an information document for drafting the Range-wide Strategy for the Conservation of the Persian Leopard (see UNEP/CMS/PL-RS1/Inf.2). The draft version of this Strategy was developed in a participatory, multiple step approach according to the "Zielorientierte Projekt Planung" ZOPP, including the status reviews and analyses of Threats and resulted in the development of a logical framework (see UNEP/CMS/CAMI/RS-PL1/Doc.2).
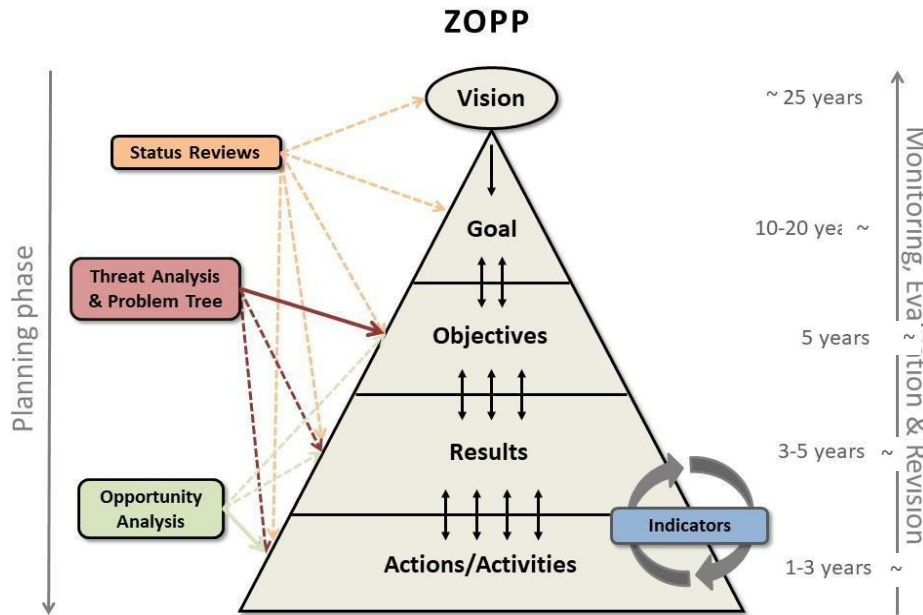
ZOPP

Figure 2.2. The ZOPP ("Zielorientierte Projektplanung" goal-oriented project planning) pyramid as a scheme to explain the planning process in a participatory workshop. The ZOPP is an analytical process (Breitenmoser et al. 2015).

Table 2.1. Glossary

Term	Explanation
Vision	A wishful perspective for the next 25-50 years, describing the ideal future scenario for the subspecies. It reflects an optimistic view of the future of the Persian Leopard and is meant to be a source of inspiration
Goal	A more concrete intention than the Vision. It is a feasible, realistic and measurable long-term aim (10-20 years) for the conservation of the subspecies
Constraints	Factors that do not impact the target subspecies negatively themselves but allow the Threats (and Drivers) to have such impact, e.g. human population growth or political issues
Drivers (of Threats)	The root causes of a direct Threat to a population; e.g., agricultural subsidies are a Driver of land use changes (direct Threat). Drivers can have further Drivers as well
Threats	Represent the immediate causes of detrimental impacts on a population. Generally, Threats are often a result of human activities, are often linked to one another and tend to have a cumulative effect, e.g. land use changes
Objectives	Support reaching the Goal and directly address important Threats and Drivers
Results	Should be achieved to reach an Objective. Results are the direct outcome of the implementation of a LogFrame and should hence be SMART (Specific, Measurable, Achievable, Relevant and Time-bound)
Activities/Actions	Should be achieved to reach a Result. Activities/Actions include a Timeline, Actor, Indicator and a Budget. Implementation of Activities/Actions is the ultimate aim of the planning process

The strategic planning process includes six steps, namely:

1. Development of a **Vision**, a wishful perspective for the next 25-50 years, describing the ideal future scenario for the subspecies. It reflects an optimistic view of the future of the Persian Leopard and is meant to be a source of inspiration;
2. Development of a **Goal**, a more concrete intention than the Vision. It is a feasible, realistic and measurable long-term aim (10-20 years) for the conservation of the Persian Leopard;
3. Performing a **Threat Analysis** and creation of the **Problem Tree**, including (direct) **Threats**, **Drivers** and **Constraints** in order to understand which obstacles and shortcomings are preventing the achievement of the Goal and Vision;
   - **(Direct) Threats** represent the immediate causes of detrimental impacts on a

population. Generally, Threats are often a result of human activity, often linked to one another and tend to have a cumulative effect; e.g., land use changes.
- **Drivers** of Threats are the root causes of a direct Threat to a population; e.g., agricultural subsidies are a Driver of land use changes (direct Threat). Drivers can have further Drivers as well.
- **Constraints** are the factors that do not impact the target subspecies negatively themselves but allow the Threats (and Drivers) to have such impact; e.g., human population growth or political issues.

4. Development of **Objectives**, which support reaching the Goal and directly address important Threats and Drivers;
5. Formulation of **Results**, which are the concrete achievements or direct outcomes needed to reach every Objective. Results are the direct outcome of the implementation of a **Logical Framework** (**LogFrame**) and should be SMART (Specific, Measurable, Achievable, Relevant and Time-bound);
6. Development of a number of **Activities** = **Actions** to achieve each Result, including a **Timeline**, **Actor**, **Indicator** and a rough **Budget**. Implementation of Activities/Actions is the ultimate goal of the strategic planning process (Breitenmoser et al. 2015, IUCN – SSC Species Conservation Planning SubCommittee 2017)

2.2. Procedural approach

The draft Range-wide Strategy for the Conservation of the Persian Leopard has been developed by 47 experts, including representatives from all the Range States (see UNEP/CMS/CAMI/RS-PL1/Doc.3). As the Covid-19 pandemic made physical meetings impossible, this Conservation Strategy was drafted during several online workshops.

Based on the Problem Tree and the Threat Ranking Table (see section 3) created throughout these workshops, four general themes were identified: (1) Conservation and sustainable management of leopard and key wild prey species, (2) Conservation of suitable habitats and connectivity, (3) Human dimensions, and (4) policy, legislation and transboundary conservation. These themes were used to guide the development of Objectives and related Results. Some cross-cutting issues were addressed in overarching Results, e.g. capacity development, international cooperation and financial capacity. These general issues need to be closely coordinated with the respective Action Points in the CAMI PoW, e.g. 7.1 – 7.5, 19.7, 19.8, and 31.1 – 31.12 (see Appendix II). To reach the Results, Activities were developed per Result and subsequently prioritised per country (see Appendix IV). The Strategy was finally summarised in a LogFrame Matrix (see Strategy), providing a tabulated overview of the elements facilitating the monitoring and evaluation of the implementation of the Conservation Strategy.

3. Threat analysis

Evaluation of Threats faced by the Persian Leopard across its range is a crucial component of strategic planning for its conservation. Understanding the nature and importance/severity of Threats, Drivers and Constraints, how they are interlinked, and what capacities the Range States have to address them is critical to be able to identify appropriate measures to mitigate Threats and achieve conservation Objectives. Therefore, a Problem Tree (Figure 3.1) and a Threat Ranking Table (Table 3.1, and Appendix III) were created based on the discussions during the workshops.

3.1. (Direct) Threats and their respective Drivers

During the online workshops, Threats and their respective Drivers were discussed as summarised in the following narrative. During these discussions, cross-cutting issues affecting multiple Threats and Drivers came up as well.

3.1.1. Illegal and accidental killing of leopards

Killing of leopards can be driven by human-wildlife conflict (e.g. retaliation for livestock losses due to leopard attacks, retaliation for attacks on humans, killing out of fear and/or pride, or opportunistically by encounter) and by the illegal trade in leopard furs and body parts. Retaliatory

killing in response to livestock losses due to leopard attacks is deemed a particularly important Threat to leopard conservation in some Range States, e.g. in Afghanistan, Azerbaijan (Talysh Mountains), Iran (Alborz Mountains), Iraq and Pakistan (Appendix III). It was, however, deemed relatively less severe in some other countries, such as Turkey, Armenia, Kazakhstan, and Turkmenistan. This is partly due to both less leopards and less weapons being available in these countries. Given that some Drivers of this conflict, e.g. inadequate livestock husbandry practices and land use changes, are considered important across the Range States (scores 2.5 and 2.4, respectively; Table 3.1), this issue should be treated as a priority (CAMI PoW 4.13 and 19.3, Appendix II). Due to the rarity of attacks on humans within the Range States, killing of leopards in response to such attacks is considered less problematic (e.g. in the Caucasus and Afghanistan, Appendix III). Even when leopards are supposedly killed in retaliation following an attack on humans, it is hard to judge and/or confirm whether these leopard killings were not rather human-induced and/or opportunistic (e.g. in the Zagros Region and the Eastern Range). Likewise, killing out of fear and/or pride can pose a Threat as well; this was especially common in the Zagros Region (Appendix III). Despite illegal trade in leopard body parts being deemed less severe across the range (score 1.2; Table 3.1), there is a market for leopard products in Uzbekistan, Afghanistan and Pakistan (Appendix III). In Iraq, regulations and law enforcement concerning wildlife trade are insufficient, and there is a need for provision of support and equipment (capacity development) to combat poaching. It is often the case that opportunistically or accidentally killed leopards (e.g. as by-catch of indiscriminate snaring) end up on the market (e.g. in the Zagros Region and in Afghanistan). Given the efforts put into the prevention of poaching and trading, the Range States' capacities to address the issue were expected to be higher. This lack of capacity regarding the prevention of poaching is therefore an urgent and priority issue to address in the near future (CAMI PoW 2.2 and 19.6, Appendix II).

3.1.2. Transmission of diseases from livestock to leopard and prey species

Disease as a direct Threat to leopards was considered to be less relevant, but transmission of diseases from livestock to prey species can pose a Threat to leopards through the depletion of their wild prey base. This was noted to be an important issue across the range (score 2.5; Table 3.1, CAMI PoW 4.11, Appendix II). In parts of the Caucasus Region, for example, populations of Wild Boar which is an important prey source for leopards have drastically declined due to the transmission of African swine fever from domestic pigs. Increasing livestock numbers and inadequate husbandry practices contribute to disease transmissions. Veterinarian and disease control services present in the Caucasus are capable of managing this problem, but the recovery of wild prey species falls beyond their responsibilities and capacities. Disease transmission was deemed less relevant in Turkmenistan and Kazakhstan (Appendix III).

3.1.3. Prey depletion

Unsustainable use of prey by local communities (i.e., poaching and/or over-hunting of prey), habitat loss (including overgrazing by livestock), habitat change (including effects of climate change), and insufficient law enforcement and capacities to address and regulate these issues are the Drivers which can lead to the depletion of the leopard's wild prey base. These Drivers negatively affect the survival of the leopard by increasing leopard mortality from hunger and from retaliatory human persecution in response to increasing livestock losses due to leopard attacks. The severity of prey depletion varies between the Range States and is a relevant issue across most of them, yet the capacities available to address it are particularly low to moderate in the Alborz-Kopet Dagh, Zagros and the Eastern Range (Table 3.1, Appendix III). With ongoing technological advancements facilitating leopard and prey poaching, such as the use of night-vision cameras and firearms, and illegal weapon trade, this issue is expected to increase and should be treated as a top priority (CAMI PoW 2.2, 2.3, 19.4, 19.6 and 19.7, Appendix II).

3.1.4. Habitat fragmentation, habitat loss and habitat change

Habitat change, habitat loss and habitat fragmentation have been the issues of high importance (CAMI PoW 19.2, 19.4, and 19.5, Appendix II). While considered as important across almost all Range States (scores 2.4 and 2.2; Table 3.1), there is a general lack of capacities to address them (score 1.3; Table 3.1). There was a specific mention of eastern Afghanistan and northern Pakistan

due to deforestation processes, and of the Caucasus Region where habitats are becoming increasingly fragmented due to continued development of infrastructure, especially roads and pipelines. Habitat loss, change and fragmentation have been driven by multiple Drivers, including climate change, settlements and land use change (e.g. development of agricultural lands), border fences and a lack of transboundary cooperation (Figure 3.1). Border fences can be a Constraint to connectivity as they potentially limit the leopard and prey movements (e.g. in Iran-Turkmenistan, southern Turkey-Syria and Turkmenistan-Kazakhstan). In some Range States, land mines placed in strategic sensitive areas pose a Threat as well (e.g. in Afghanistan, Armenia, Azerbaijan and Turkey).

3.1.5. Road mortality/collisions

As leopard is a wide-ranging species, one of the Threats to its survival is that of road mortality due to vehicle collisions, e.g. in the Zagros Region (Appendix III) and in north-eastern Iran of the Alborz-Kopet Dagh Region. This issue is closely linked with habitat fragmentation described above. Although not deemed an issue of the highest importance (score 1.3; Table 3.1), it is difficult to say whether there will be sufficient capacity to deal with the issue if it becomes more prominent as a result of increased infrastructure development (score 1.3; Table 3.1). Applications of mitigating interventions, such as green bridges or underpasses, are difficult to realize due to high demands for resources, expertise and political will.

3.1.6. Isolation and genetic impoverishment of leopard populations

The aforementioned issues of habitat fragmentation, loss and change, combined with population declines, can result in isolation of small leopard populations and consequently in their genetic impoverishment. Habitat fragmentation makes the dispersal of individuals and exchanges between neighbouring populations increasingly difficult and risky as leopards may die while crossing human-dominated landscapes. The main concerns arising from these limitations are restricted movements (especially of females), a subsequent lack of breeding and genetic impoverishment of leopard populations (e.g. in Iraq). There is between-country variation in capacities to address the isolation issue (e.g. suitable habitat, engineering capacity, financial means, political interest and scientific understanding), and in perceptions of the severity of genetic impoverishment of leopard populations (Appendix III). The lack of scientific insight across the Range States should be addressed (CAMI PoW 19.7, Appendix II).

3.1.7. Feral dogs, free-ranging dogs and livestock guarding dogs

The issues surrounding feral, free-ranging and livestock guarding dogs can be considered a Threat as well as a Driver. Leopard attacks on guarding dogs, which can be provoked by dog barking and aggressive behaviour towards leopards, and the general attraction of Leopards to dogs as a potential prey, can drive the human-leopard conflict and retaliatory killings (e.g. in borderline areas between Turkmenistan and Iran). However, dogs can potentially spread diseases, attack and injure leopards and their prey species, which can threaten leopard survival. This emerging issue is currently not considered important across the Range States (score 1.6; Table 3.1), but there is a lack of understanding and research (Table 3.1. and CAMI PoW 4.12 and 19.3, Appendix II).

3.2. Constraints on alleviating Threats and Drivers

Conserving the Persian Leopard requires mitigation of Threats and Drivers on a large spatial scale. Constraints preventing conservation targets from being reached were therefore discussed as well.

3.2.1. Failed policies, political instability and armed conflict

Failed policies, political instability and armed conflict were seen as a substantial Constraint across the Persian Leopard's range. Failed policies explain how a species that allegedly is legally protected across its entire range is further declining. Insufficient law enforcement, PA effectiveness, prosecution, control over livestock grazing practices, and poor applications of rules and regulations in national livestock economics can result in failed policies. When conflicts arise over Objectives or trade-offs between different priorities and ministries, environmental arguments are often ignored in favour of economic factors. This can mean that failed policies are not able to successfully prevent

the encroachment into PAs, promotion of linear infrastructure development in sensitive areas and/or ignorance of possible mitigation measures. Political instability and armed conflict can hamper the implementation of conservation efforts.

3.2.2. Attitudes of people, social values and pressures, cultural norms and ignorance

Attitudes of people, social values and pressures, cultural norms, ignorance and possible negative feelings towards conservation (e.g. PAs and restrictive environmental policies) are believed to be important Constraints in conservation efforts. They can, for example, impede wildlife conservation outside of PAs, influence the effectiveness of PAs and (opportunistic) leopard killing out of fear or pride, and can affect the ongoing rates of habitat loss and change. As attitudes can influence (local) people's behaviour and priorities, it is an important Constraint to consider (CAMI PoW 19.9, 19.10 and 19.11, Appendix II).

3.2.3. Socio-economic development, human population growth and lifestyle, and livelihoods

Lastly, socio-economic development, livelihoods, and human population growth and lifestyle were identified as possible Constraints. These Constraints can influence Drivers: settlements and land use change, climate change, infrastructure development and technology development (Figure 3.1). Given the ongoing human population growth, socio-economic developments, and aspirations for improved livelihoods, these Constraints are important to consider in the Strategy, but are difficult to be effectively addressed.

Table 3.1. The Threat Ranking Table showing the identified Constraints, Drivers and Threats (current and emerging) ranked across the entire Persian Leopard range. Drivers (D) and Threats (T) were ranked according to their importance/severity (scores: 0 = non-existent, 1 = minor, 2 = medium, 3 = major) and the capacities available to address them (scores: 1 = poor, 2 = medium, 3 = good). For a more detailed table showing regional scores and, wherever applicable, country-specific scores, see Appendix III. The way how Constraints, Drivers and Threats are interlinked is visualised in the Problem Tree (Figure 3.1).

Constraints		
Human population growth and lifestyle		
Livelihoods		
Attitudes: social values/pressures, cultural norms, ignorance (including negative feelings towards conservation)		
Socio-economic development		
Failed policies, political instability and armed conflicts (including priorities in governmental agenda)		
Drivers	*Importance/severity*	*Capacity*
Unsustainable use of prey populations (poaching/over-hunting)	2.7	2.4
Unsustainable use of prey populations (poaching/over-hunting)	2.7	2.4
Inadequate livestock husbandry	2.5	2.1
Increased livestock numbers	2.5	2.1
Insufficient wildlife conservation outside of PAs	2.5	1.3
Settlements and land use changes	2.4	1.2
Weak law enforcement	2.4	1.3
Infrastructure development	2.3	1.0
Climate change (droughts, lack of water etc.)	2.2	1.8
Illegal trade in guns and weapons	2.1	1.5
Lack of transboundary/regional/national cooperation	2.1	1.8
Border fences	2.0	1.3
Lack of capacities (including scientific knowledge, lack of experts) and support (logistics, funding, know-how)	1.9	1.8
Technology development (facilitates poaching)	1.6	1.3
Unjustified optimism about the leopard's conservation status	1.5	1.3
Illegal trade in fur and body parts	1.2	1.6
Threats	*Importance/severity*	*Capacity*
Transmission of diseases from livestock to leopard and its prey	2.5	1.7
Habitat fragmentation	2.4	1.3

Retaliatory killing (T) in response to livestock losses due to leopard attacks (D)	2.3	1.5
Habitat loss/change (including habitat modification)	2.2	1.3
Key wild prey depletion	2.2	2.2
Isolation of leopard populations	1.9	1.4
Genetic impoverishment of leopard populations	1.7	1.5
Feral dogs, free-ranging dogs and livestock guarding dogs	1.6	1.4
Illegal killing (T) out of fear, pride and opportunistic (D)	1.5	1.3
Retaliatory killing (T) in response to attacks on humans (D)	1.4	1.0
Road mortality/collisions	1.3	1.3
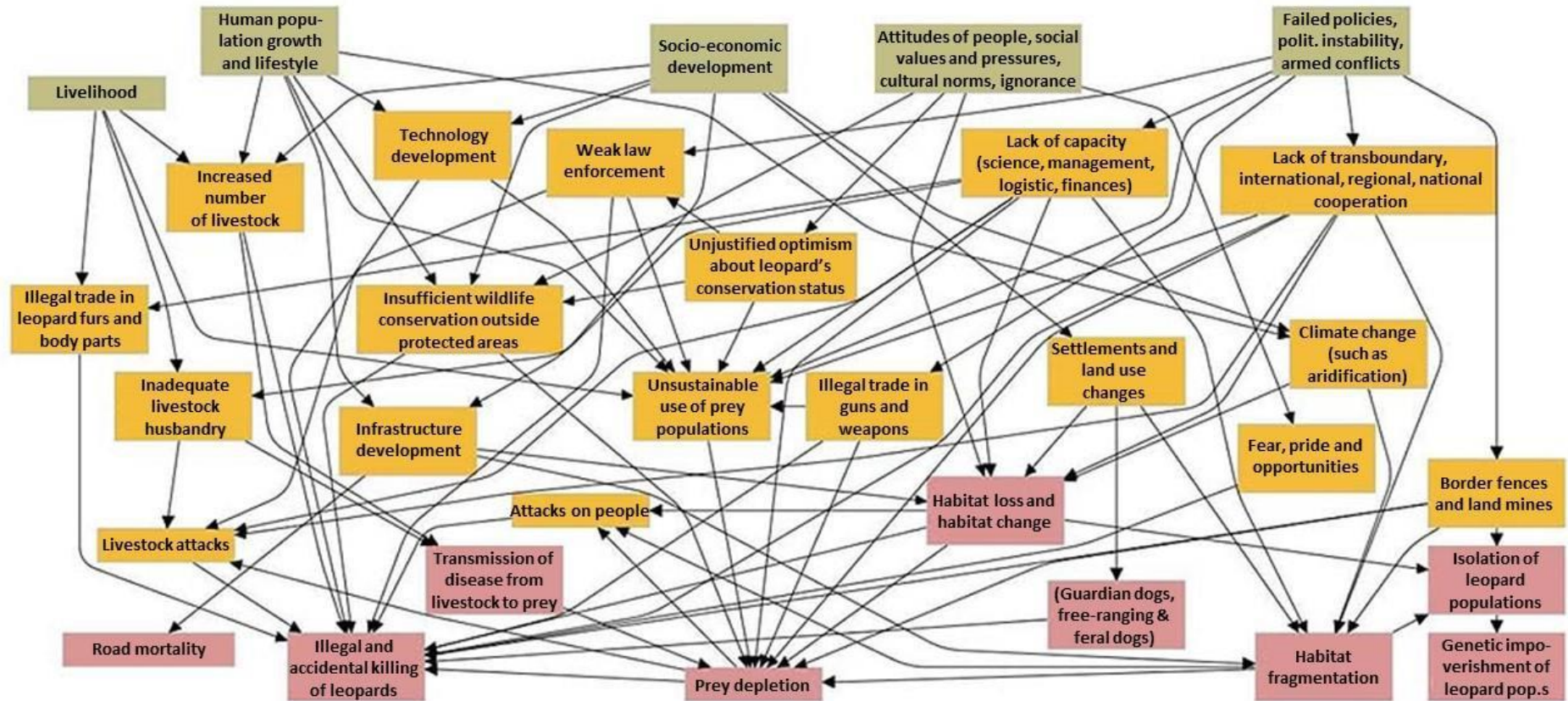
Figure 3.1. The Problem Tree. Brown = Constraints, orange = Drivers, and red = Threats. For details and relative rankings see Table 3.1 and Appendix III.

4. Reference list

Breitenmoser U., Lanz T., Vogt K. & Breitenmoser-Würsten C. 2015. How to save the cat - Cat Conservation Compendium, a practical guideline for strategic and project planning in cat conservation. Cat News Special Issue 9, 36 pp.

IUCN SSC Species Conservation Planning Sub-Committee (2017) Guidelines for Species Conservation Planning. Version 1.0. Gland, Switzerland: IUCN. xiv + 114 pp.

Appendix I. Workshop participants

First name	*Last name*	*Affiliation*	*Range State*
Nasratullah	Jahed		Afghanistan
Zalmai	Moheb	WCS- Afghanistan Program	Afghanistan
Vasil	Ananyan	WWF-Armenia	Armenia
Igor	Khorozyan	University of Göttingen	Armenia
Alexander	Malkhasyan	WWF-Armenia	Armenia
Karen	Manvelyan	WWF-Armenia	Armenia
Konul	Ahmadova	WWF-Azerbaijan	Azerbaijan
Elshad	Askerov	WWF-Azerbaijan	Azerbaijan
Maka	Bitsadze	WWF-CauPO	Georgia
Bejan	Lortkipanidze	NACRES	Georgia
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Kaveh	Hobeali		Iran
Marzieh	Mousavi	Department of Environment	Iran
Mohammad	Nosrati	Department of Environment	Iran
Niloufar	Raeesi		Iran
Pooriya	Sepahvand		Iran
Bahareh	Shahriari	Department of Environment	Iran
Mahmood	Soofi	University of Göttingen	Iran
Hana	Raza	Nature Iraq	Iraq
Mark	Pestov		Kazakhstan
Vladimir	Terentiev		Kazakhstan
Muhammad	Kabir		Pakistan
Natalia	Dronova	WWF Russia	Russia
Jose-Antonio	Hernandez Blanco	Severtsov Institute of Ecology and Evolution	Russia
Alim	Pkhitikov	Institute of Ecology of Mountain Territories of the Russian Academy of Sciences	Russia
Anna	Yachmennikova	Sevetsov Inst. of Ecology and Evolution	Russia
Özgün Emre	Can	Ankara University	Turkey
Deniz	Mengüllüoğlu		Turkey

First name	Last name	Affiliation	Range State
Hojamurad	Hojamuradov	Sunt Hasardag Reserve	Turkmenistan
Nurmuhammet	Hudaykuliev	Head of the scientific department of the Badhyz State Nature Reserve	Turkmenistan
Shirin	Karrieva		Turkmenistan
Aknabat	Potaeva	Head of the scientific dep. of the Kopetdag State Nature Reserve	Turkmenistan
Mariya	Gritsina	Research Institute of Zoology/MSF	Uzbekistan
Rustam	Murzakhanov	Michael Succow Foundation	Uzbekistan
Benjamin	Bleyhl	Humboldt University Berlin	International
José Dias	Ferreira	European Association of Zoos and Aquaria	International
Peter	Gerngross	Silvestris	International
Arash	Ghoddousi	Humboldt University Berlin	International
Aurel	Heidelberg	World Wildlife Fund Deutschland	International
Tobias	Kuemmerle	Humboldt University Berlin	International
Stephane	Ostrowski	World Conservation Society	International
Tatjana	Rosen	Caucasus Nature Fund	International
Alexander	Sliwa	EAZA	International
Christine	Breitenmoser	Cat Specialist Group	Facilitator
Urs	Breitenmoser	Cat Specialist Group	Facilitator
Eline	Brouwer	Cat Specialist Group	Facilitator
Tabea	Lanz	Cat Specialist Group	Facilitator

Appendix II. Related Activities from CMS CAMI PoW

PROGRAMME OF WORK FOR THE CENTRAL ASIAN MAMMALS INITIATIVE (2021-2026) – **CAMI points referred to throughout Activities**
(Transboundary Cooperation: pages 6-7; Illegal Hunting, Possession and Trade: pages 7-8; Overgrazing and Livestock Competition: pages 10-11;
Community Engagement and Sustainable Use: pages 11-12; Capacity Development: pages 12-13; Leopard: pages 19−20; Coordination, Data Sharing and
Review Processes: pages 26; and Funding: pages 27-28)

1. Transboundary Cooperation	Responsible	Priority

1.1. Develop an understanding and make best use of political processes, specifically:
   a) CMS to coordinate a review of the formal processes within each Range State concerning adoption of transboundary conservation agreements; and
   b) Highlight areas where CMS and other conservation partners can have an influence.
	CMS, Government agencies	Medium

1.2. Build on existing agreements, specifically:
   a) Use the Transboundary Hotspots study to identify entry-points for enhanced cooperation with other existing Multilateral Environmental Agreements (MEAs), governmental/multi-partner agreements and platforms in the CAMI region;
   b) Partner with and integrate migratory species conservation into relevant MEAs;
   c) Explore the possibility to strengthen cooperation between CITES and CMS on CAMI similar to the Joint CITES-CMS African Carnivores Initiative;
   d) Partner with ongoing processes on Other Effective Area Based Conservation Measures (OECMs) such as CBD and IUCN working groups with a view to integrating CAMI;
   e) Promote regular exchange between National Focal Points of CMS and other relevant MEAs.
	CMS, INGOs, NGOs, relevant MEAs and international fora, Gov. agencies	Medium

1.3. Implement the recommendations outlined in the Transboundary Hotspots study, specifically:
   a) Continue the process to highlight priority sites;
   b) Identify stakeholders and crucial actors for all identified hotspots;
   c) Establish working groups for each of the proposed priority sites to elaborate work streams for establishing transboundary cooperation as appropriate;
   d) Carry out targeted workshops for priority sites identified in the study;
   e) Encourage countries to set up Memoranda of Understanding or Agreements for the conservation of those priority sites;
   f) Review and update the Transboundary Hotspots study for the next CAMI Range State Meeting.
	CMS, IUCN, Gov. agencies, NGOs, GSLEP	High

1.4 Build on and enhance scientific and working level collaboration, specifically:
   a) Continue promoting formal and informal collaboration through scientific working groups and conferences;
   b) Encourage cooperation at field and working level on survey, research, monitoring and management as well as for study tours and exchange visits.
	CMS, all NGOs with presence across relevant countries, Scientific institutions	High/ Medium

1.5. Increase awareness about the benefits of transboundary cooperation among governments and stakeholders	CMS, Gov. agencies, NGOs	High
1.6. Use the existing knowledge and experience available to advance transboundary cooperation, e.g. taking into account the IUCN diagnostic tool for analysing the feasibility of setting up Transboundary Conservation Areas (TBCA).	CMS, Gov. agencies, NGOs	Medium
1.7. Foster the development of transboundary solutions to facilitate the removal and / or mitigation of border fences.	CMS, Gov. agencies, NGOs	High
1.8. Urge all CAMI Range States to become a contracting Party to CMS and CITES.	CMS, Gov. agencies	High
2. Illegal Hunting, Possession and Trade	**Responsible**	**Priority**
2.1. Promote the review of national legislation (in line with the CMS National Legislation Programme) and its enforcement with regard to illegal hunting, possession and trade (including relevant penalties, the simplification of prosecution, bonus payment mechanisms to create adequate incentives for enforcement personnel and reinvest fines in conservation, enforcement powers of rangers and recognition of cybercrime) and compliance with CITES.	Gov. Agencies, NGOs	High
2.2 Increase and strengthen the technical capacity of rangers and other relevant enforcement personnel to counteract illegal hunting, possession and trade, including by providing the appropriate equipment to address it (see also 7.5).	Gov. Agencies, NGOs	High
2.3 Promote the use of new technologies, methods and tools for enforcement (including use of SMART (Spatial Monitoring and Reporting Tool), wildlife detection dogs, risk assessments).	Gov. Agencies, Sci. institutions	High/ medium
2.4. Improve inter-agency communication and cooperation (i.e. multi-agency task forces) at the national and regional levels concerning scientific, management and enforcement issues (e.g. through the development of a Wildlife Enforcement Network and greater cooperation with Customs, Border Control, Police and Judiciary).	Gov. Agencies, NGOs	High/ medium
2.4. Improve inter-agency communication and cooperation (i.e. multi-agency task forces) at the national and regional levels concerning scientific, management and enforcement issues (e.g. through the development of a Wildlife Enforcement Network and greater cooperation with Customs, Border Control, Police and Judiciary).	Gov. Agencies, NGOs TRAFFIC (tbc), CITES (tbc)	High/ medium
2.6 Secure support by local communities for addressing illegal hunting, possession and trade through outreach and development of "citizen/informant networks".	Gov. Agencies, NGOs TRAFFIC (tbc), CITES (tbc)	High
2.7 Promote cooperation between relevant agencies to improve access to and take action against illegal hunting, possession and trade information on the internet.	Gov. Agencies, NGOs	Medium
2.8 Foster and promote community and incentive-based approaches to combat the underlying causes of illegal hunting (see also section 5)	Gov. Agencies, NGOs	High
4. Overgrazing and Livestock Competition	**Responsible**	**Priority**
4.1 Undertake research on pasture productivity and suitability, disease impacts, grazing and livestock management, extent and scale of standing herds as investments, feasibility of traditional pastoralism, livestock vs. soil / rangeland carbon sequestration, wildlife conflicts, effects of climate change and seasonal use and disseminate the results to relevant managers.	Gov. agencies, Sci. inst. NGOs	High

4.2 Review and modify existing grazing norms (both legal and customary) based on carrying capacity and critical wildlife habitat	Gov. agencies, Sci. inst. NGOs	High
4.3 Identify routes to enact mechanisms that will encourage livestock owners to invest in quality (breeds promotion, herd health, added-value livestock products, productivity) rather than quantity.	Gov. agencies, NGOs	High
4.4 Develop and promote awareness and educational programmes among herding communities on wildlife protection, conflict resolutions, and the unintended impact of livestock intensification.	Gov. agencies, NGOs	High
4.5 Promote a range of strategies (e.g. alternative livelihoods, temporary no-grazing, etc.) in herding communities to reduce livestock numbers and focus on livestock as their main asset.	Gov. agencies, NGOs, Businesses	High
4.6. Establish joint working groups with relevant organizations, including pastoralist communities, to address pasture use and wildlife protection issues.	Gov. agencies facilitated by NGOs	High
4.7. Create incentive mechanisms for members in the herding communities residing near wildlife and / or protected areas / ecological corridors to become community rangers (see also 5.1, 5.8 and 5.11).	Gov. agencies, local communities, NGOs	High
4.8. Explore options to minimize livestock grazing on wildlife migration routes (where possible).	Gov. agencies, Sci. inst., NGOs, herders, local communities	High
4.9. Encourage livestock owners to insure their livestock against natural disasters and discourage them from killing wildlife in times of heavy livestock losses.	Gov. agencies, insurance sector, NGOs	Medium
4.10. Introduce certification schemes for livestock products originating from sustainably managed rangelands	Gov. agencies, NGOs	Medium
4.11. Support the vaccination of livestock and herder dogs against transmissible diseases to wildlife sharing the same landscape.	Gov. agencies, NGOs, local communities, herders	High
4.12. Explore methods to control and reduce numbers of free-ranging herder and feral dogs and their impact on wildlife populations.	Gov. agencies, NGOs, local communities, herders	High
4.13. Implement and promote the use of conflict reduction methods to avoid wildlife-livestock conflicts.	Gov. agencies, NGOs, local communities, herders, Sci. inst.	High
4.14. Design grazing rangeland management plans based on scientific research and with involvement of local communities outside of protected areas.	Gov. agencies, NGOs, Sci. inst.	High
4.15. Promote community-based pasture management to increase ownership and responsibility for the protection of pastures by local communities.	Gov. agencies, NGOs, local communities, herders, Sci. inst.	High

5. Community Engagement and Sustainable Use	Responsible	Priority
5.1. Promote sustainable livelihood schemes linked to conservation and local conditions, which should benefit conservation and whole communities in the long term.	National and international NGOs	High
5.2. Support local development (education, health, energy etc.), linked to conservation and the needs of the communities.	Gov. agencies, INGOs, Development agencies	Medium
5.3. Promote predator proof corrals among communities to avoid killing of livestock by predators.	Gov. agencies, NGOs	High
5.4. Promote the regulation of water use by livestock in places with limited water resources in order to allow wildlife access to the water.	As a platform CMS, for implementation: national and international NGOs	High / medium
5.5. Establish and share best practice of community-based insurance schemes (predation, other conflict, bad weather etc.) and establish community-based conservation awards/support schemes.	As a platform CMS, for implementation: national and international NGOs	High / medium
5.6. Provide culturally and species-appropriate activities and rewards for motivated community members and teachers using current examples such as establishing wildlife clubs and celebrating species days and using communication strategies.	National and international NGOs, Gov. agencies (e.g. education ministry)	Medium
5.7. Build functional associations within and between communities along migration routes, under the mandate of national governments, to facilitate communication and cooperation.	Gov. agencies, community leaders, local gov. agencies, NGOs	Medium
5.8. Promote and support the use of local knowledge and skills in community-based management plans, participatory research, and reporting outcomes, in a suitable language and format.	Local and national NGOs, Sci. inst.	High
5.9. Promote non-extractive use especially community-based ecotourism within the CAMI region and develop sustainable ecotourism programmes.	NGOs, Tourism companies	Medium
5.10. Integrate biodiversity conservation issues (for migratory species) into the strategies of international and national development agencies with community and rural development programmes.	CMS, Gov. agencies	High
5.11. Engage community conservationists and promote direct involvement in conservation initiatives, such as monitoring anti-poaching, ecotourism and citizen science and empower local community organizations by assigning them an official status and role.	National/Local Government agencies, NGOs	High

5.12. Encourage investment from NGOs and business, especially local large industries (e.g. oil, gas, mining) to support community conservation initiatives on migratory species.	CMS, International NGOs currently involved	Medium
5.13. Promote regular and sound monitoring of species and apply best practices for sustainable use in order to ensure that any legal hunting of species is sustainable and supports conservation, taking also into account the wide-ranging movements of most species.	Gov. agencies, Scientific institutions, NGOs, communities	High
5.14. Assess the feasibility of sustainable use of CAMI species across the region, looking at accruing benefits for local communities, as well as relevant legislation.	Gov. agencies, NGOs	Medium
5.15. Promote community-based practices and explore other sustainable wildlife use options (i.e. subsistence hunting, photography, ecotourism) that create incentives for conservation and review according legislation.	Gov. agencies, NGOs	High
7. Capacity Development	**Responsible**	**Priority**
7.1. Develop and implement funding schemes and training programmes in wildlife conservation for students and emerging conservationists on monitoring, participatory involvement, conservation planning and implementation in partnership with relevant scientific institutions and IUCN Species Specialist Groups.	Gov. agencies, Sci. inst., NGOs	High
7.2. Train protected area and community-based rangers and managers in wildlife management, human-wildlife conflict, combating illegal hunting and developing participatory conservation.	Gov. agencies, Sci. inst., NGOs	High
7.3. Launch annual / biannual wildlife conservation meetings for CAMI Range States as a continuous forum for wildlife conservation in the region.	Gov. agencies, Sci. inst., NGOs	High
7.4. Strengthen the capacity of rangers and other relevant enforcement personnel to counteract illegal hunting and trade and secure necessary funding (i.e. human resources, equipment, training).	Gov. agencies, Sci. inst., NGOs	High
7.5. Improve the capacity of implementing partners to undertake participatory and technically sound planning and implementation of research, conservation and sustainable use.	Gov. agencies, Sci. inst., NGOs	Medium
19. Persian Leopard (*Panthera pardus saxicolor*)	**Responsible**	**Priority**
19.1. Develop a range-wide strategy for the conservation of the Persian Leopard (inclusive of other non-CAMI Range States, i.e., Armenia, Azerbaijan, Georgia, Iraq and Turkey) and update national strategies and conservation action plans.	Gov. agencies, Sci. inst., NGOs, CMS	High
19.2. Identify priority areas for transboundary conservation and collaboration and establish and/or support a network of well-managed transboundary protected areas, including community-managed areas.	Gov. agencies, Sci. inst., NGOs	High
19.3. Test and implement approaches that have had some measure of success in reducing human-Leopard conflict (e.g. predator-proof corrals, fox lights, change of husbandry practices, conservation-performances payments, removal of traps, etc).	Gov. agencies, Sci. inst., NGOs	High
19.4. Explore options to address habitat loss, by buying out grazing rights to support recovery of wild prey, conservation easements and other innovative models.	Gov. agencies, Sci. inst., NGOs	High

19.5. Work with relevant national agencies to gain an understanding of corridors and barriers to connectivity, such as border fences, and develop mitigation options including the protection of migration corridors.	Gov. agencies, Sci. inst., NGOs	High
19.6. Provide technical support and equipment to protected area and community-area rangers to monitor wildlife and combat poaching.	Gov. agencies, Sci. inst., NGOs	High
19.7. Develop a uniform system for monitoring Leopards and their prey through camera traps, surveys, DNA sampling and the use of satellite telemetry and disease in Leopards and their prey, as well as first response protocols.	Gov. agencies, Sci. inst., NGOs	High
19.8. Develop a communication platform for communicating and analysing data, especially in case of transboundary populations of Leopards.	Gov. agencies, Sci. inst., NGOs	High
19.9. Publish an annual bulletin highlighting all activities related to the conservation of the Persian Leopard in the region and develop a website under CMS CAMI.	Gov. agencies, Sci. inst., NGOs, CMS	Medium
19.10. Develop school curricula to promote the value and importance of the Persian Leopard, its role in connecting countries in the region.	Gov. agencies, Sci. inst., NGOs	Medium
19.11. Designate a day in the year as Persian Leopard Day.	Gov. agencies, Sci. inst., NGOs	Medium
29. Coordination, data sharing and review processes	**Responsible**	**Priority**
29.1. Strengthen the staff resources for the coordination of CAMI within and possibly outside of the CMS Secretariat to enable sustainable and long-term coordination services for CAMI.	CMS, Gov. agencies, Scientific institutions, NGOs	High
31. Funding	**Responsible**	**Priority**
31.1. Continue and expand existing initiatives and funding programmes to support implementation of CAMI and its POW. Such as the IUCN SOS Central Asia Programme as a funding mechanism specifically designed to provide funding for the implementation of the POW.	IUCN, Gov. agencies, NGOs	High
31.2. Promote co-funding to donor initiatives from governments as well as co-funding from donors to government initiatives for the implementation of the POW	Gov. agencies	High/ Medium
31.3. Include conservation actions for migratory species as outlined in the POW in the existing / updated / elaborated state programmes on nature protection.	Gov. agencies	High
31.4. Channel national environmental funds that exist under state bodies and include measures on migratory species and the implementation of the POW.	Gov. agencies, NGOs	High/ Medium
31.5. Conduct an 'inventory' of donors and funding programmes and identify a "champion" for CAMI.	CMS, NGOs	Medium
31.6. Explore funding options through the Global Environment Fund (GEF) including GEF Small Grants Programme projects for joint proposals between several countries with involvement of GEF implementing agencies (World Bank, Asian Development Bank, UNDP) in the processes of project application.	Gov. agencies, NGOs, CMS	High/ Medium

31.7. Strengthen bilateral cooperation between countries as well as with donors in fundraising and joint project development.	Gov. agencies, Donors, CMS	Medium
31.8. Consider organizing charity events or other innovative funding sources to mobilize funding for CAMI and its POW.	Gov. agencies, NGOs, CMS	Low
31.9. Engage in and contribute to the development of donors' funding priorities in line with CAMI.	CMS, NGOs, INGOs	High/ medium
31.10. Develop mechanisms for using revenues from sustainable wildlife management for conservation activities (e.g. trophy hunting and others) in cooperation with CITES.	Gov. agencies, NGOs	High/ medium
31.11. Establish a trust fund for CAMI, including with funding from the private sector.	Gov. agencies, CMS, Private sector companies	Medium
31.12. Scale-up fundraising by applying ecoregional, landscape or transboundary approaches to project development.	Coordination from CMS, Gov. agencies, NGOs	Medium

Appendix III. Threats ranked by regions and Range States

The **Threat Ranking Table** showing the identified Constraints, Drivers and Threats (current and emerging) ranked per region: Caucasus (C), Alborz-Kopet Dagh (A), Zagros (Z) and Eastern Range (E). Drivers and Threats were ranked according to their importance/severity (scores: 0 = non-existent, 1 = minor, 2 = medium, 3 = major, - = unknown or not applicable) and the capacities available to address them (scores: 1 = poor, 2 = medium, 3 = good). AF = Afghanistan, IR = Iran, KZ = Kazakhstan, PK = Pakistan, TM = Turkmenistan, UZ = Uzbekistan.

Constraints (not ranked)

Human population growth and lifestyle

Livelihoods

Attitudes: social values and pressures, cultural norms, ignorance (including negative feelings towards conservation)

Socio-economic development

Failed policies, political instability and armed conflicts (including priorities in governmental agenda)

Drivers	Importance/severity				Capacity				
	Overall	C	A	Z	E[1]	Overall	C	A	Z	E
Unsustainable use of key wild prey populations (poaching/ overhunting)	2.7	2.8	2.0 (TM 1.5)[2]	3.0	3.0 (UZ 3) (AF 3) (PK 3)	2.4	2.8	2.5 (KAZ 1.5)	2.5[3]	1.7 (UZ 2) (AF 1) (PK 2)
Inadequate livestock husbandry	2.5	2.0	2.0 (KZ 1)	3.0	3.0 (UZ 3) (AF 3) (PK 3)	2.1	2.5	2.0 (KZ 1)	2.0[4]	2.0 (UZ 2) (AF 2) (PK 2)
Increased livestock numbers	2.5	2.0	2.0 (KZ 1)	3.0	3 (UZ 3) (AF 3) (PK 3)	2.1	2.5	2.0 (KZ 1)	2.0	2.0 (UZ 2) (AF 2) (PK 2)

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[1] In Pakistan, participants considered two subspecies, *P. p. fusca* and *P. p. tulliana.*
[2] Only legal hunting was considered for over-hunting
[3] Implementation of rules is weak, but this is not an issue in Iraq
[4] There is traditional capacity, but not enough systematic practice. There are e.g. shepherd Facebook groups sharing experiences on livestock husbandry

Drivers	Importance/severity					Capacity				
	Overall	C	A	Z	E[5]	Overall	C	A	Z	E
Insufficient wildlife conservation outside of PAs	2.5	3.0	1.0 (IR 1) (TM 1) (KZ 1)	3.0	3 (UZ 3) (AF 3) (PK 3)	1.3	1.5	1.0 (IR 1) (TM (1) KZ (1)	1.0	1.6 (UZ 2) (AF 1) (PK 2.5)
Settlements and land use changes	2.4	3.0	2.0	2.0	2.5 (UZ 3) (AF 1.5) (PK 3)	1.2	1.0	1.5 (KZ 1)	1.0	Not filled in
Weak law enforcement	2.4	2.0	Not filled in	3.0	2.3 (UZ 1) (AF 3) (PK 3)	1.3	2.0	Not filled in	1.0 (IR 2)	1.3 (UZ 1) (AF 1) (PK 2)
Infrastructure development	2.3	3.0 (IR 2)	2.0	2.0	2.3 (UZ 3) (AF 1) (PK 3)	1.0	1.0	Not filled in	1.0	Not filled in[6]
Climate change (droughts, lack of water etc.)	2.2	1.0	3.0 (KZ 2)	2.5	2.3 (UZ 3) (AF 2) (PK 2)	1.8	2.0	3.0[7]	1.0	1.3 (UZ 1) (AF 1) (PK 2)[8]
Illegal trade in guns and weapons	2.1	2.0	2.0 (TM 0) (KZ -)	2.0	2.3 (UZ 1) (AF 3) (PK 3)	1.5	1.5	2.0 (KZ -)	1.0	1.3 (UZ 2) (AF 1) (PK 1)

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[5] In Pakistan, participants considered two subspecies, *P. p. fusca* and *P. p. tulliana.*
[6] A lack of political will, rather than capacities, was an issue
[7] Lack of water access is easy to address, but the general issue is much more complicated
[8] Scientific capacity

Drivers	Importance/severity				Capacity				
	Overall	C	A	Z	E[9]	Overall	C	A	Z	E
Lack of transboundary/regional/ national cooperation	2.1	3.0	2.0 (IR 2) (TM 2) (KZ 2)	2.0	1.3 (UZ 2) (AF 1) (PK 1)	1.8	2	3.0 IR (3) TM (3) KZ (3)	1.0	1.3 (UZ 2) (AF 1) (PK 1)
Border fences	2.0	2.0	2.0	2.0	2.3 (UZ 2) (AF 2.5) (PK 2.5)	1.3	1.0	2.0	1.0	Not filled in[7]
Lack of capacities (including scientific knowledge, lack of experts) and support (logistics, funding, know-how)	1.9	2.3	1.0 (IR 1) (TM 1) (KZ 1)	2.0	1.6 (UZ 2) (AF 1) (PK 2)	1.8	1.8	2.0 IR (2) TM (2) KZ (2)	1.0	2.3 (UZ 2) (AF 3) (PK 2)
Technology development (facilitates poaching)	1.6	3.0 (IR 2)	1.0 (KZ 2)	1.0	1.3 (UZ 2) (AF 1) (PK 1)	1.3	2.0	- (KZ 1)	1.0	1.0 (UZ 1) (AF 1) (PK 1)
Unjustified optimism about the leopard's conservation status	1.5	1.0 (IR 2)	2.0 (TM 0) (KZ -)	2.0[10]	1 (UZ -) (AF 1) (PK 1)	1,3	1.0	2.0 (KZ -)	1.0	Not filled in
Illegal trade of fur and body parts	1.2	1.0	-[11]	1.0[12]	1.7 (UZ 1) (AF 2) (PK 2)	1.6	2.5	1.0	1.0	1.7 (UZ 2) (AF 1) (PK 2)

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[9] In Pakistan, participants considered *P. p. fusca* as well as *P. p. tulliana.*
[10] Not applicable to Turkey, here the numbers are underreported. Efforts for the Zagros population should be stronger.
[11] International trade
[12] Not directed, usually opportunistic killings end up on the market

Threats	Importance/severity					Capacity				
	Overall	C	A	Z	E[13]	Overall	C	A	Z	E
Transmission of diseases from livestock to leopard and its key wild prey	2.5	3.0 (IR 2)	3.0 (TM 1) (KZ 1)	2.0	2.0 (UZ -) (AF 2) (PK 2)	1.7	2.0	2.0 (TKM 1) (KAZ 1)	1.0[14]	1.7 (UZ 1) (AF 2) (PK 2)
Habitat fragmentation	2.4	3.0	1.5 (KZ 1)	3.0	2 (UZ 2) (AF 1) (PK 3)	1.3	2.0	1.0	1.0	1.0 (UZ 1) (AF 1) (PK 1)
Retaliatory killing in response to livestock losses due to leopard attacks	2.3	2.0 (IR 3)	2.3 (IR 3) (TM 2) (KZ 2)	3.0	2.0 (UZ -) (AF 3) (PK 3)	1.5	2.0	2.0	1.0	1.0 (UZ 1) (AG 1) (PK 1)
Habitat loss/change (incl. habitat modification)	2.2	2.0	1.5 (KZ 1)	3.0	2.3 (UZ 2) (AF 2) (PK 3)	1.3	2.0	1.0	1.0	1.3 (UZ 1) (AF 1) (PK 2)
Key wild prey depletion	2.2	2.5	1.0	3.0	2.3 (UZ 3) (AF 1) (PK 3)	2.2	3.0	1.0	1.0	1.7 (UZ 2) (AG 1) (PK 2)
Isolation of leopard populations	1.9	2.0	1.5 (KZ -)[15]	2.0	2.0 (UZ -) (AF 2) (PK 2)	1.4	2.0	1.0 (KZ -)	1.0	1.5 (UZ -) (AF 1) (PK 2)
Genetic impoverishment of leopard populations	1.7	2.0 (IR 1)	1.0 (KZ -)	-	2.0 (UZ 3) (AF 1) (PK 2)	1.5	3.0	1.0 (KZ -)	1.0	1.0 (UZ 1) (AG 1) (PK 1)

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[13] In Pakistan, participants considered *P. p. fusca* as well as *P. p. tulliana.*
[14] Capacity includes the burning of carcasses.
[15] To date, there is no stable Leopard population in Kazakhstan, as only occasional entries from the neighbouring countries are reported

Threats	Importance/severity					Capacity				
	Overall	C	A	Z	E[16]	Overall	C	A	Z	E
Guard dogs, domestic dogs, and feral dogs	1.6	1.0	2.0 (TKM 0) (KAZ 1)	2.0	1.3 (UZ 1) (AF 1) (PK 2)	1.4	-	2 (KAZ 1)	1.0	1.3 (UZ 1) (AF 1) (PK 2)
Illegal killing out of fear, pride and opportunistic	1.5	1.0 (IR 2)	1.0 (KZ -)	2.0	2.0 (UZ 1) (AF 3) (PK 2)	1.3	1.0	2.0 (KZ -)	1.0	1.0 (UZ 1) (AG 1) (PK 1)
Retaliatory killing in response to attacks on humans	1.4	1.0	Not filled in	2.0[17]	1.5 (UZ 1) (AF 1) (PK 2.5)	1.0	1.0	Not filled in	1.0	1.0 (UZ 1) (AG 1) (PK 1)
Road collisions/mortalities	1.3	1.0	1.0 (TM 0) (KZ -)	2.0	1.0 (UZ 1) (AF 1) (PK 1)	1.3	2.0 (IR 1)	1.0 (KZ -)	1.0	1.0 (UZ 1) (AG 1) (PK 1)

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[16] In Pakistan, participants considered *P. p. fusca* as well as *P. p. tulliana.*
[17] Uncertainty about whether these attacks were indeed opportunistic or human-induced

Appendix IV. Proposed Activities ranked by Range States

Prioritisation ranking of Activities: 1 = low, 2 = medium, 3 = high. Abbreviations: A = Activity, O = Objective, AF = Afghanistan, AM = Armenia, AZ = Azerbaijan, GE = Georgia, IR = Iran, IQ = Iraq, KZ = Kazakhstan, PK = Pakistan, RU = Russia, TR = Turkey, TM = Turkmenistan, UZ = Uzbekistan.

Activity	*AF*	*AM*	*AZ*	*GE*	*IR*	*IQ*	*KZ*	*PK*	*RU*	*TR*	*TM*	*UZ*
1.1.1. Review recent information and available data on habitat and Persian Leopard occurrence in the Range States and identify priority areas and research and conservation needs to secure viable Persian Leopard populations in these priority areas	3.00	2.00	1.50	3.00	2.50	3.00	3.00	3.00	1.00	3.00	3.00	3.00
1.1.2. Organise workshops to develop best-practice management for priority areas and disseminate to responsible authorities and local/regional stakeholders to ensure implementation and policy uptake (see Activity 1.1.4)	3.00	2.50	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00
1.1.3. Develop and enhance guidance on national protected areas for identifying new protected areas and wildlife corridors in regard to Persian Leopard conservation needs in a workshop as in Activity 1.1.2 (see Activity 5.2.1)	3.00	2.50	3,00	1.00	2.50	1.00	2.00	3.00	1.00	3.00	2.00	2.00
1.1.4. Promote the inclusion of protected areas for the Persian Leopard and conservation needs for the species conservation in national policies (see Activity 1.1.2)	2.00	3.00	2.00	1.00	2.50	3.00	1.00	2.00	1.00	3.00	1.00	3.00
1.2.1. Promote standardised and methodologically advanced approaches to monitor Persian Leopard population viability and connectivity (camera-trapping, genetic analysis, disease screening etc.) based on the monitoring standards defined under Activity 3.3.1 and 3.3.2	3.00	2.00	2.00	2.00	3.00	3.00	2.00	3.00	3.00	2.50	3.00	3.00
1.2.2. Conduct surveys and regular monitoring (applying the guidelines developed under Activity 3.3.1) in priority Persian Leopard areas (see Activity 5.1.2)	3.00	2.50	2.50	3.00	3.00	3.00	2.00	2.00	1.00	3.00	3.00	3.00
1.2.3. Establish a programme for caretakers and rangers in at least one region/metapopulation[18] to monitor and protect Persian Leopards and habitats (see Activity 1.2.2)	3.00	2.00	1.50	2.00	2.00	3.00	3.00	1.00	2.00	1.50	3.00	3.00
1.2.4. Develop and implement recommendations to achieve and/or conserve viable and interconnected (sub)populations of Persian Leopards in priority areas for at least one region/ metapopulation	2.00	3.00	2.50	2.00	3.00	2.00	1.00	2.00	1.00	3.00	2.00	2.00
1.2.5. Conduct national legislation gap analyses with regard to the conservation of Persian Leopard and possibly other CAMI species sharing the same habitat	3.00	1.50	1.50	2.00	2.00	2.00	1.00	3.00	1.00	1.00	2.00	2.00

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[18] See Figure 1 in the Strategy document for the delineation of the metapopulations.

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
or similar threats and promote updates of legislation as needed with national institutions (parliament, government; see Objective 10)												
1.2.6. Secure resources to enforce the (updated) legislation for Persian Leopard protection	2.00	2.00	2.00	1.00	3.00	2.50	1.00	2.50	2.00	2.00	1.00	2.00
1.3.1. Establish a programme for caretakers and rangers in at least two regions/metapopulations to monitor and protect key wild prey species and habitats	2.00	2.00	1.50	1.00	2.00	3.00	3.00	1.00	1.00	1.50	3.00	2.00
1.3.2. Assess the status and conservation needs of key wild prey populations in to secure viable prey populations in priority Persian Leopard areas	1.50	3.00	3.00	2.00	2.50	3.00	3.00	3.00	3.00	2.00	3.00	3.00
1.3.3. Develop and apply reintroduction and/or recovery programmes wherever it is necessary	1.50	3.00	3.00	2.00	2.00	2.50	1.00	3.00	3.00	2.00	3.00	2.00
2.1.1. Develop and implement management plans of priority protected areas as identified in Activity 1.1.1	1.00	2.50	3.00	2.00	3.00	3.00	1.00	2.00	2.00	1.50	3.00	2.00
2.1.2. Assess the effectiveness of implementation of the management plans of key protected areas standardised tools (e.g. METT) and revise management plans accordingly (see Activity 5.2.2)	1.00	2.50	3.00	3.00	2.50	2.00	1.00	1.00	3.00	1.50	2.00	2.00
2.2.1. Develop and implement sustainable land-use plans for the identified priority areas (see Activity 1.1.1) and other conservation measures outside and between protected areas	2.00	3.00	3.00	3.00	3.00	3.00	1.00	3.00	3.00	3.00	2.00	3.00
2.2.2. Assess the implementation of sustainable land-use plans in priority areas regarding wildlife conservation. and revise/update these plans as needed	1.00	2.50	2.50	2.00	2.00	1.50	1.00	1.00	3.00	1.00	2.00	3.00
3.1.1. Secure resources/capacities necessary to conduct surveys and to map Persian Leopard records and key wild prey species in accordance with the outcomes of A 1.2.1 (also → A 9.4.1 & 9.4.2)	3.00	3.00	3.00	3.00	2.50	3.00	2.00	3.00	3.00	2.50	3.00	3.00
3.1.2. Conduct surveys of identified potential Persian Leopard habitat (according to the results of Activity 1.2.1 & 5.1.2) in collaboration with stakeholders in identified priority areas in order to map Persian Leopard and key wild prey occurrence	3.00	2.50	2.00	3.00	2.50	3.00	2.00	3.00	3.00	3.00	3.00	3.00
3.2.1. Identify the status and main Threats of Persian Leopard and their key wild prey in surveyed habitats under Activity 3.1.2, taking into account also the outcomes of Activity 1.2.2	3.00	3.00	1.50	3.00	3.00	3.00	2.00	3.00	2.00	2.50	3.00	3.00
3.2.2. Monitor priority Persian Leopard areas regularly in regard to the status of the Persian Leopard and its key wild prey in accordance with Activity 1.2.2 applying the guidelines developed under Activity 3.3.1	2.00	3.00	3.00	3.00	3.00	3.00	2.00	1.00	2.00	3.00	3.00	3.00
3.3.1. Produce guidelines/manuals describing monitoring standard practices and methods in local languages	3.00	2.50	3.00	3.00	3.00	3.00	1.00	3.00	1.00	1.00	3.00	2.50

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
3.3.2. Adopt and implement the standardised guidelines/manual for monitoring Persian Leopard and its key wild prey species (see Activities 1.2.1, 3.2.2 & 3.3.1) by dedicated monitoring teams	3.00	2.50	2.00	3.00	2.50	2.00	1.00	3.00	2.00	2.50	3.00	2.50
3.4.1. Develop and adopt guidelines for sharing and structuring data on Persian Leopard and its key wild prey species within and between Persian Leopard Range States	2.00	3.00	3.00	3.00	1.50	1.50	1.00	3.00	3.00	2.00	2.00	3.00
3.4.2. Develop regional databases of Persian Leopard records and key wild prey species, especially in transboundary areas, aimed to help identify individual Persian Leopards and their movements	1.00	3.00	3.00	3.00	2.50	3.00	1.00	3.00	3.00	2.00	2.00	3.00
3.4.3. Make the databases accessible, successfully used, and regularly updated by all Persian Leopard Range States	1.00	2.00	2.00	1.00	1,50	2.00	1.00	2.00	3.00	1.50	2.00	3.00
3.5.1. Develop standardised national/regional Persian Leopard status reports, e.g. based on the data entered into the databases (see Activities 3.4.1 & 3.4.3)	1.00	2.50	2.00	2.00	2.50	2.00	1.00	2.00	2.00	2.00	2.00	1.00
4.1.1. Conduct a feasibility study of rescue centres across the Persian Leopard range including all Range States: Make an inventory of facilities able to hold Persian Leopards in each Range State, and identify possible rescue centres including a possibility of shared (international) centres.	1.00	1.75	2.50	1.00	3.00	3.00	1.00	3.00	2.00	3.00	1.00	1.00
4.1.2. Establish and equip specific Persian Leopard rescue centres[19] in identified institutions or build new ones where needed/feasible	2.00	1.75	3.00	1.00	3.00	3.00	1.00	2.00	2.00	3.00	1.00	1.00
4.1.3. Develop an *ex situ* husbandry plan and protocol(s) for taking care of wild Persian Leopards and a decision-making tree for their destinies (in English) and adapt them to the national conditions and responsibilities (in national languages)	3.00	1.75	1.50	1.00	3.00	3.00	1.00	1.00	1.00	3.00	1.00	1.00
4.1.4. Educate the husbandry staff and veterinarians of rescue centres in taking care of wild Persian Leopards	2.00	1.75	2.00	1.00	3.00	3.00	1.00	2.00	3.00	3.00	1.00	1.00
4.2.1. Develop guidelines/specific protocol(s) (in English) for *in situ* interventions and rescue operations of Persian Leopards and adapt them to the national conditions and responsibilities (in national languages)	2.00	1.75	2.00	1.00	2.50	2.00	1.00	3.00	2.00	3.00	1.00	1.00
4.2.2. Establish a training plan/protocol (based on the *in situ* guidelines; A 4.2.1.) for education of intervention task forces in the Persian Leopard Range States	2.00	1.75	2.00	1.00	3.00	3.00	1.00	2.00	3.00	3.00	1.00	1.00
4.2.3. Establish and train at least one task force per Range State about rapid *in situ* interventions to capture/rescue injured Persian Leopards or problem animals in the field in cooperation with national wildlife management bodies and the rescue centres	2.00	1.75	2.00	1.00	3.00	3.00	1.00	3.00	3.00	3.00	1.00	1.00

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[19] Templates for rescue centres are available for other species or, explicitly for Persian Leopards, from facilities in EEP zoos or specific Breeding Centres.

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
4.3.1. Expand the current EAZA Long-Term Management Plan for the Persian Leopard EEP into a strategy for the *ex situ* Persian Leopard population including all institutions and animals, respectively, in the Persian Leopard Range States to ensure a demographically and genetically healthy captive population for future re-introduction activities	1.00	2.00	1.50	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	1.00
4.3.2. Develop and implement standardised release and post-release monitoring protocols for the *ex situ* Persian Leopard population in the Range States	1.00	2.00	2.00	1.00	3.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
5.1.1. Produce high-resolution habitat suitability/occupancy models for Persian Leopard and its key wild prey species based on best available data and modelling techniques to inform spatially explicit conservation plans	3.00	2.00	2.50	2.00	2.00	3.00	2.00	3.00	3.00	1.50	2.00	2.50
5.1.2. Ground-proof/validate habitat models and prove Persian Leopard and key wild prey presence at national level summarise finding in respective national reports to be shared with relevant institutions	3.00	2.00	2.50	2.00	2.00	3.00	2.00	3.00	2.00	1.50	2.00	3.00
5.2.1. Recommend the identified priority Persian Leopard areas to the relevant authorities of each Range State to be taken into account as a scientific basis for protected area system decisions (see Activities 5.1.1 & 5.1.2)	2.00	3.00	2.50	3.00	3.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00
5.2.2. Update or develop management plans for priority protected areas and agree upon including the information on priority suitable habitats and new scientific results (see Activities 2.1.3 & 5.1.1 – 5.1.3)	1.00	3.00	2.50	3.00	3.00	3.00	2.00	1.00	3.00	2.00	2.00	2.00
5.2.3. Establish the unified reporting system of implementation of standardised management effectiveness tracking tools (e.g. METT) across protected areas of Persian Leopard Range States	1.00	2.50	2.50	2.00	1.50	1.00	2.00	2.00	2.00	1.50	2.00	2.00
5.2.4. Monitor the protected area management effectiveness by using available standardised tools (e.g. METT) in the protected areas of Persian Leopard Range States and adapt according to the outcomes	1.00	2.50	3.00	3.00	2.00	1.50	2.00	1.00	2.00	1.50	2.00	2.00
5.3.1. Identify Persian Leopard and prey movement corridors and evaluate barriers and threats with the use of adequate tools best available data	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
5.3.2. Develop and implement management plans for important corridors including mitigation of movement barriers and threats	1.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	3.00
5.3.3. Monitor functionality of corridors and evaluate measures to mitigate barriers and Threats	1.00	3.00	3.00	3.00	3.00	2.50	2.00	2.00	3.00	1.50	2.00	3.00
6.1.1. Identify key local stakeholder groups for Persian conservation in priority areas/corridors, and develop specific programmes for each group (see Activity 9.1.1)	1.00	2.50	3.00	2.00	3.00	2.50	3.00	3.00	2.00	2.50	3.00	3.00

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
6.1.2. Implement specific programmes for key stakeholders and local communities to enhance their involvement in Persian Leopard conservation (see Activity 9.1.2 & 9.2.1)	1.00	2.50	2.50	1.00	2.50	2.00	3.00	2.00	2.00	2.00	3.00	2.00
6.1.3. Monitor the effectiveness of the specific programmes and adapt them wherever needed	1.00	3.00	3.00	3.00	2.50	1.00	2.00	2.00	2.00	1.50	2.00	1.00
7.1.1. Perform an inclusive assessment of conflicts related to livestock losses to Persian Leopard attacks, including the local availability of key wild prey	3.00	2.00	2.50	1.00	3.00	2.50	2.00	3.00	2.00	1.00	2.00	3.00
7.1.2. Develop and promote locally adapted livestock protective measures in collaboration with local communities in sites with high conflict levels (see Activity 7.1.1)	3.00	1.50	2.00	1.00	3.00	2.00	2.00	3.00	2.00	1.50	2.00	3.00
7.1.3. Survey and assess livestock grazing in priority areas inside and outside PAs across the Persian Leopard range, with an emphasis on habitats degraded from overgrazing	1.00	1.00	1.50	1.50	2.00	2.50	2.00	3.00	3.00	1.00	2.00	3.00
7.1.4. Identify respective livestock husbandry guidelines for protected and corridor areas to prevent overgrazing (see Activity 7.1.3)	1.00	1.00	1.50	1.50	2.00	2.50	2.00	3.00	3.00	1.00	2.00	3.00
7.1.5. Train pastoralists about conflict mitigation tools and sustainable livestock husbandry practices through collaborative workshops	3.00	1.50	2.00	1.00	3.00	2.50	2.00	3.00	2.00	1.50	2.00	3.00
7.1.6. Monitor and evaluate the effects of conflict mitigation measures and adopted livestock husbandry on local economy, Persian Leopard and key wild prey populations, and adapt guidelines as needed	3.00	1.50	2.00	1.00	3.00	2.50	2.00	2.50	2.00	2.00	2.00	3.00
7.2.1. Assess the impact of feral dogs, free-ranging dogs and livestock guarding dogs on Persian Leopard and key wild prey species in priority areas (see Activity 7.1.2)	1.00	1.00	1.50	1.00	2.50	2.50	1.00	3.00	1.00	2.00	2.00	2.00
7.2.2. Share the assessment reports with relevant stakeholders (GOs, local communities) to address conflicts and inform management (see Activity 7.1.2)	1.00	1.00	1.50	1.00	2.00	2.00	1.00	3.00	2.00	1.50	1.00	3.00
8.1.1. Develop a strategy to involve and integrate local communities and different stakeholder groups on issues related to Persian Leopard, wildlife, and nature conservation	2.00	2.50	2.00	1.00	2.50	3.00	2.00	2.00	2.00	2.00	2.00	2.00
8.1.2. Implement the strategy to involve and integrate local communities and improve different stakeholder groups on issues related to Persian Leopard, wildlife, and nature conservation	2.00	2.50	2.50	1.00	3.00	3.00	2.00	2.00	3.00	2.00	2.00	2.00
8.1.3. Implement locally adaptable human-Leopard conflict mitigation measures (e.g. electric fencing, trained livestock guarding dogs, trained pastoralists, livestock protective collars, predator-proof corrals) in areas with high conflict levels (see Activity 7.1.1 & 7.1.2)	3.00	1.50	2.50	1.00	3.00	2.00	3.00	3.00	2.00	1.50	3.00	3.00

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
8.1.4. Develop and implement livestock compensation schemes or livestock insurance where livestock losses from carnivore attacks is high and where it is feasible (see Activity 7.1.2)	1.00	1.50	2.00	1.00	3.00	2.00	3.00	3.00	3.00	1.50	3.00	3.00
8.2.1. Develop and implement plans for integrative livestock husbandry practices and sustainable rangeland management in priority protected areas and priority non-protected areas (see Activities 2.2.1, 7.1.3 & 7.1.4)	1.00	1.50	1.50	2.00	2.50	2.50	2.00	2.00	2.00	1.00	2.00	3.00
9.1.1. Identify target groups in priority areas and assess their level of awareness of Persian Leopard, wildlife and environment in general	2.00	2.00	2.00	1.00	2.00	1.50	3.00	3.00	3.00	2.00	3.00	2.50
9.1.2. Develop and implement education programmes in the priority areas of Persian Leopard habitats addressing the needs of identified target groups as defined in the assessment report (see Activity 9.1.1)	2.00	2.50	2.00	1.00	2.50	2.00	3.00	3.00	2.00	2.00	3.00	1.00
9.2.1. Develop and implement a scheme on information sharing with local communities and target groups about conservation of the Persian Leopard and nature in general	2.00	2.50	2.00	1.00	2.00	1.00	2.00	3.00	3.00	1.50	3.00	2.00
9.3.1. Assess needs for capacity development in regard to awareness-raising and consistent educational programmes and identify the points of action as well as key people to address and consider (see Activities 8.1.1, 9.1.2, 12.2.1 & 12.2.2)	2.00	2.00	1.50	1.00	2.00	1.50	2.00	2.00	2.00	1.50	2.00	1.00
9.3.2. Address the points of action identified under Activity 9.3.1 to enhance and create the capacity needed for awareness-raising and consistent educational programmes by conducting participatory workshops and trainings with identified key people (see Activity 8.1.1 & 8.1.2)	2.00	2.00	1.50	1.00	2.00	1.50	2.00	2.00	3.00	1.00	3.00	1.00
9.3.3. Continually re-assess needs for capacity development in regard to awareness-raising and educational programmes and if needed repeat workshops and trainings as defined under Activity 9.3.2	2.00	2.00	1.50	1.00	1.50	1,00	2.00	2.00	2.00	1.50	2.00	1.00
9.4.1. Identify gaps in Persian Leopard research and conservation and develop capacity building programmes for the target groups (e.g. students, scientists and wildlife rangers) addressing those gaps	3.00	3.00	2.50	3.00	2.00	3.00	2.00	3.00	3.00	2.50	2.00	2.00
9.4.2. Implement capacity building programmes for the target groups (e.g. students, scientists and wildlife rangers, community supporters/Persian Leopard caretakers)	2.00	3.00	2.50	3.00	2.50	3.00	2.00	3.00	2.00	3.00	3.00	2.00
10.1.1. Organise expert meetings for development/up-date of National Action Plans (NAPs) based on the range wide Conservation Strategy and revise or develop NAPs	3.00	2.50	3.00	3.00	2.50	3.00	1.00	1.00	1.00	3.00	2.00	1.00
10.1.2. Promote the approval of NAPs by national authorities	3.00	2.00	2.50	2.00	2.00	2.50	1.00	2.00	1.00	3.00	2.00	1.00
10.2.1. Organise consultations with national stakeholder and/or experts to prepare adaptive proposals for NAPs	2.00	2.00	2.00	1.00	1.50	1.50	1.00	1.00	1.00	2.50	2.00	1.00

Activity	*AF*	*AM*	*AZ*	*GE*	*IR*	*IQ*	*KZ*	*PK*	*RU*	*TR*	*TM*	*UZ*
10.2.2. Update the NAPs according to the recommendation reports of Activity 10.2.1 based on the adaptive management framework	2.00	2.50	2.50	2.00	2.00	1.50	1.00	1.00	1.00	2.00	2.00	1.00
11.1.1. Identify transboundary monitoring/survey areas for Persian Leopard (see Activity 3.1.1 & 3.1.2)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	2.50	3.00	3.00
11.1.2. Establish a monitoring work programme for transboundary monitoring initiatives, and conduct meetings at least once a year (see Activity 1.2.1, 1.2.3, 3.1.1, 3.1.2, 3.2.1., 3.2.2 & 3.3.1)	3.00	3.00	2.50	3.00	2.50	2.50	3.00	3.00	3.00	3.00	2.00	3.00
11.1.3. Implement the monitoring work programme as defined under 11.1.2. (see Activity 1.2.2. & 3.3.2.)	3.00	3.00	2.50	3.00	3.00	2.50	2.00	2.00	2.00	3.00	2.00	2.00
11.1.4. Prepare annual national monitoring reports (at least in priority areas) and share them with CMS CAMI, other Range States and relevant stakeholders (see Activity 3.4.1, 3.4.2, 3.4.3 & 3.5.1)	3.00	2.50	2.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	2.00	2.00
11.2.1. Train and equip national customs and other relevant GOs to minimise illegal trade of Persian Leopards and their parts as well of other species	3.00	1.25	1.50	1.00	2.00	2.00	1.00	3.00	1.00	1.00	1.00	2.00
11.2.2. Assure the exchange of information between national customs, national and international CITES TRAFFIC offices, and national Persian Leopard monitoring working groups ($\rightarrow$ A 11.1.2 & 3.4.1 – 3.4.3)	1.00	1.25	1.00	1.00	2.00	2.00	1.00	2.00	1.00	1.50	1.00	2.00
11.2.3. Promote the inclusion of intelligence on illegal Persian Leopard trade and illegal wildlife trade[20] generally into conservation plans (e.g. NAPs) by developing recommendations on how to combat illegal trade ($\rightarrow$ A 10.1.2 & 10.2.2)	2.00	1.25	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00
11.3.1 Develop concrete transboundary conservation initiatives (based on common regional conservation strategies/agreements (e.g. ECP; see Activity A 10.1.2 & 10.2.2))	3.00	2.50	1.50	2.00	2.50	2.50	2.00	2.00	2.00	3.00	2.00	2.00
11.3.2 Identify transboundary landscapes relevant to Persian Leopard conservation initiatives based on the results from Activity 11.1.1 (see Activities 1.1.1 & 3.1.1)	3.00	3.00	2.50	3.00	2.50	2.50	2.00	3.00	3.00	3.00	2.00	2.00
11.3.3. Develop spatially explicit transboundary conservation initiatives in a participatory process including working groups and relevant stakeholders of all Range States and implement the selected transboundary initiatives led by respective national governmental bodies	2.00	3.00	2.50	3.00	3.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00
12.1.1. Define the cooperation between governmental, non-governmental and academic institutions for Persian Leopard conservation in the frame of the development or revision of the NAPs for Persian Leopard	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	3.00	2.00	2.00

[20] Consider synergies between other action plans and strategies

Activity	AF	AM	AZ	GE	IR	IQ	KZ	PK	RU	TR	TM	UZ
12.1.2. Identify the needs for Persian Leopard-related transboundary cooperation and arrange respective agreements (e.g. MEA) in the frame of CMS CAMI	3.00	2.00	1.50	1.00	1.50	1.00	2.00	1.00	3.00	3.00	2.00	2.00
12.2.1. Produce an overview report with a realistic timeline and budget for the implementation of this Conservation Strategy and a list of additional priority projects for Persian Leopard conservation (see Activity 12.2.3)	2.00	2.00	1.50	1.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	2.00
12.2.2. Integrate Persian Leopard conservation into the CAMI fundraising strategy and establish the Persian Leopard as a flagship species to raise funds also for projects related to Persian Leopard habitats, key wild prey and human-Persian Leopard co-existence	3.00	3.00	2.50	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	2.50
12.2.3. Ensure that NAPs based on this range-wide Conservation Strategy include concrete budgets for each Activity.	3.00	3.00	2.00	2.00	2.50	2.00	1.00	3.00	3.00	3.00	1.00	2.00
12.2.4. Create and promote a project and a budget plan aligned to the Activities defined in this range-wide Conservation Strategy and/or NAPs to address private donors in fundraising	3.00	3.00	2.00	2.00	3.00	2.00	1.00	3.00	3.00	3.00	1.00	3.00