

## Summary of Results: Key Actions Important for the Conservation of Migratory Mammals in Central Asia

The following activities were prepared based on the findings of an assessment of gaps and needs of migratory mammal conservation in Central Asia (Karlstetter & Mallon 2014) and the results of stakeholder consultation meetings in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan in May and June 2014. They are structured around ten key priority issues and intended to provide a basis for discussions at the Stakeholder Meeting to Conserve Large Mammals in Central Asia, Bishkek, Kyrgyzstan, 23-25 September 2014.

### Issue 1: Illegal hunting and trade

Activity	Synergies with other initiatives/ stakeholder
1.1 Share experience and lessons learnt from revising national legislation on hunting and domestic trade in wildlife products to promote review/revision where required <sup>1</sup> ; harmonize national legislation with CMS and CITES requirements <sup>2</sup> and promote accession of non-member states to CITES.	WICAC, CMS Saiga MOU, CMS Argali AP, CPW
1.2. Promote the review and revision of legislation relevant to prosecution and fines where required to ensure appropriate levels of fines and incentives for enforcement personnel in terms of salaries, insurance, bonuses for detaining offenders, regular training and career perspectives; promote transparent prosecution to counteract corruption and reinvestment of fines in conservation measures. See also 10.1.	CMS Saiga MOU, CMS Argali AP, GSLEP Program
1.3 Identify priority sites for strengthening the capacity of enforcement personnel and share experience in and training manuals on strengthening law enforcement; combine funding to improve training of and resource provision to enforcement personnel (e.g. rangers, local and border police, customs, community rangers). See also 10.3.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, ICCWC, United for Wildlife
1.4 Explore and promote the use of innovative technology to support enforcement (e.g. the Spatial Monitoring and Report Tool SMART <sup>3</sup> , forensic genetic identification of illegally traded meat, sniffer dogs).	CMS Saiga MOU, CMS Argali AP, GSLEP Program, United for Wildlife
1.5 Explore and promote sustainable wildlife use options that create incentives for conservation <sup>4</sup> including community based management of migratory mammals; closely cooperate and coordinate with range countries in utilizing transboundary wildlife populations and avoid competitive disadvantages. See also 5.3 and 8.4.	CMS Saiga MOU, CMS Argali AP, CPW, GIZ

<sup>1</sup> Taking into account recommendation from Morgera *et al.* (2009) and Mallon (2013).

<sup>2</sup> Taking into account the recommendations from Vaisman *et al.* (2013) to control trade in the Eurasian Customs Union.

<sup>3</sup> See <http://www.smartconservationsoftware.org>.

<sup>4</sup> Taking into account the CBD Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, the IUCN/SSC Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives (IUCN/SSC 2012) and the Framework for CITES non-detriment findings for hunting trophies from Parry-Jones (2013).

Activity	Synergies with other initiatives/ stakeholder
1.6 Promote information exchange between enforcement personnel of species range, transit and consumer countries to counteract illegal hunting and trade effectively. See also 6.1.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program
1.7 Publicly condemn illegal hunting, selling, buying and consumption of migratory mammals, using among others social campaigns; raise consumer awareness. See also 9.2.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program

## Issue 2: Overgrazing and competition with livestock

Activity	Synergies with other initiatives/ stakeholders
2.1 Share experience and lessons learnt from revising legislation relevant to livestock and pasture management and promote the review/revision where required to take into account and provide for needs of migratory mammals inside (where allowed) and outside of protected areas; correct legal and/or policy incentives for overstocking rangeland.	CACILM, CMS Argali AP, GLSEP Program, UNDP, FAO, GIZ
2.2 Identify critical wildlife habitat that suffers negative impacts from livestock grazing and closely work with the agricultural sector and local people towards restricting the use for livestock on a seasonal or year-round basis; monitor pasture conditions to prevent degradation. See also 8.5.	CMS Argali AP, GLSEP Program, FAO, UNCCD, UNDP, GIZ
2.3 Improve livestock survival to compensate for restricted access to pastures/reduced livestock numbers (e.g. through improved shelters and veterinary care).	CACILM, CMS Argali AP, GLSEP Program, FAO, GIZ, UNDP
2.4 Promote the development/restoration of sustainable pasture use regimes. See also 8.2.	CACILM, CMS Argali AP, GLSEP Program, UNCCD, UNDP, FAO, GIZ
2.5 Further research on wild-domestic herbivore interaction with emphasis on dietary overlap and disease transfer and promote the development of protocols for disease monitoring and adequate response measures <sup>5</sup> . See also 7.2.	CMS Argali AP, GLSEP Program
2.6 Strengthen enforcement of livestock grazing restrictions inside protected areas. See also 10.3.	CMS Argali AP, GLSEP Program, UNDP

<sup>5</sup> Taking into account the IUCN Guidelines for Wildlife Disease Risk Analysis (OIE & IUCN 2014) and the Manual of Procedures for Wildlife Disease Risk Analysis (Jakob-Hoff et al. 2014).

### Issue 3: Industry and infrastructure development

Activity	Synergies with other initiatives/ stakeholders
3.1 Share experience and lessons learnt from revising legislation relevant to industry and infrastructure development and promote the review/revision where required promoting compliance with international standards for assessing social and environmental impacts (including wildlife), and the application of the mitigation hierarchy including the provision of adequate offsetting mechanisms; take into account and provide for the needs of migratory mammals in development policies and agendas.	Green Economy Initiative, GBPP, PEBLDS, CMS Saiga MOU, CMS Argali AP, UNDP, PAGE
3.2 Identify important wildlife habitat that is under threat of being negatively impacted by industry and infrastructure development and closely work with the national and international development sector towards promoting landscape level planning to avoid or mitigate impacts taking into account cumulative effects from neighbouring development sites; promote the exclusion of critical wildlife habitat from development and designate no-use zones for extractive industries.	ALTID, CAREC, EATL, SPECA, TRACECA, CMS Saiga MOU, CMS Argali AP, GSLEP Program, UNDP, UNECE, ESCAP, ADB, EBRD, IMF, IDB, WB, ECO, EU, WTO
3.3 Identify existing and planned linear infrastructure (e.g. roads, railways, border and other fences) causing barriers to migration/movements of large mammals and promote their modification or apply other adequate measures (e.g. road curfews) to mitigate impacts <sup>6</sup> .	CMS Saiga MOU, CMS Argali AP, GSLEP Program
3.4 Share experience in engaging with the private sector and promote raised awareness and strengthened capacity at governments, the private sector, the civil society and NGOs to address negative impacts from development on migratory mammals adequately.	CMS Saiga MOU, CMS Argali AP, GSLEP Program, CSBI
3.5 Realize opportunities for conservation financing from the private sector.	CMS Saiga MOU, CMS Argali AP, GSLEP Program
3.6 Further research on impacts of linear barriers to migration/ movements of large mammals and the efficiency of mitigation measures.	CMS Saiga MOU, CMS Argali AP, GSLEP Program

### Issue 4: Climate change

Activity	Synergies with other initiatives/ stakeholders
4.1 Further research on the possible effects of climate change on migratory mammals and habitats, with particular emphasis on diet, biology, migrations/movements and diseases; monitor changes in vegetation composition.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program
4.2 Conduct climate change vulnerability assessments for migratory mammals and develop possible response scenarios taking into account scenarios of human response to climate change; identify high risk areas for migratory mammals and address key anthropogenic factors limiting species adaptation to climate change (e.g. barriers to migration, small population numbers, habitat loss).	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program
4.3 Consider possible future shifts in mammal migration/movements during land use and development planning; maintain connectivity of habitats and populations of migratory mammals nationally and internationally. See also 1.3 2.2, 3.2 and 8.2.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program

<sup>6</sup> Taking into account the guidelines and recommendations provided by Olson (2012) and Olson (2013).

## Issue 5: Governance in natural resource management

Activity	Synergies with other initiatives/ stakeholders
5.1 Share experience and lessons learnt from revising legislation related to involving local people in the decision-making process concerning natural resource management and promote the review/ revision where required. See also 1.1.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP, EU, GIZ
5.2 Improve communication with local people and promote civil society participation in the planning of development projects and protected area management.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP
5.3 Promote transparency and equity of access to natural resources and in the distribution of revenues derived from natural resource use (e.g. sustainable hunting, nature tourism), and promote accountability of revenue spending. See also 1.5.	CMS Saiga MOU, CMS Argali AP, UNDP
5.4 Share experience in strengthening the capacity of local NGOs.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP

## Issue 6: Transboundary communication and cooperation

Activity	Synergies with other initiatives/ stakeholders
6.1 Establish and/or strengthen mechanisms for promoting exchange of information and experience on conservation of migratory mammals between Range States. See also 1.6.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, IUCN
6.2 Conduct exchange visits, joint training and joint/coordinated activities in the field of but not limited to species population monitoring, law enforcement, removing or modifying border fences, regulating and coordinating sustainable use of transboundary wildlife populations, and wildlife/livestock disease investigation.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP, GIZ
6.3 Identify sites of critical importance for transboundary populations of migratory mammals and promote the establishment of transboundary protected areas. See also 10.2.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP

## Issue 7: Scientific knowledge on migratory mammals and their habitat

Activity	Synergies with other initiatives/ stakeholders
7.1 Share experience in and training manuals aimed at improving monitoring particularly of but not limited to population numbers, sex/age composition, mortality, distribution, migration/ movements, diseases, habitat condition, and combine funding to upscale training of and resource provision to personnel/institutions responsible for and engaged in monitoring (e.g. protected area and/or hunting concession personnel, scientists, students, local NGOs and communities); promote the development of standardised monitoring protocols.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP, EU, GIZ, IUCN
7.2 Further research on species biology, anthropogenic impacts and their socio-economic and cultural drivers, ecosystem services provided by migratory mammals and their habitat, and genetics to clarify taxonomy (where required). See also 2.5, 3.6 and 4.1.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, IUCN, GIZ
7.3 Establish and/or strengthen mechanisms for promoting information and data exchange between scientists and practitioners.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, IUCN
7.4 Enthuse and invest in a young generation of conservation scientists and practitioners; promote training and post-graduate education in close cooperation with national universities and schools (e.g. through exchange programmes, themed scholarships); lobby for conservation as career perspective (e.g. at green job fairs). See also 8.2.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program

## Issue 8: Local communities and sustainable livelihoods

Activity	Synergies with other initiatives/ stakeholders
8.1 Take into account and provide for the needs of migratory mammals in rural development policies and agendas.	ENVSEC, CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, CPW, UNDP, IFAS/ ICSD, GIZ, USAID, CAMP4CA
8.2 Closely work with the rural development cooperation sector to strengthen the capacity of communities in the vicinity of important habitat for migratory mammals that negatively impact wildlife populations (e.g. illegal hunting and trade, livestock grazing, unsustainable use of fuel wood) to make informed choices towards sustainable livelihoods <sup>7,8</sup> .	PEI, ASBP, ENVSEC, CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, CPW, UNDP, IFAS/ ICSD, GIZ, USAID, CAMP4CA

<sup>7</sup> Chambers & Conway (1992) define sustainable livelihoods as follows: “A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels in the long and short term.”

<sup>8</sup> Taking into account the Sustainable Livelihoods Enhancement and Diversification approach (IMM 2008).

Activity	Synergies with other initiatives/ stakeholders
8.3 Establish community platforms that support access to information related to sustainable livelihoods development.	ENVSEC, CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, Aarhus Convention, UNDP, CPW, IFAS/ ICSD, GIZ, USAID, CAMP4CA, OSCE
8.4 Where feasible develop tangible benefits for local communities from the conservation and sustainable use of biodiversity through financial and non-financial incentives (e.g. community conservation incentive agreements). See also 1.5.	CMS Saiga MOU, CMS Argali AP
8.5 Take into account negative impacts from conservation measures to local people (e.g. grazing restrictions, hunting bans, livestock depredation) and share experience in developing adequate sustainable compensation mechanisms.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, CPW

#### Issue 9: Public awareness

Activity	Synergies with other initiatives/ stakeholders
9.1 Assess and promote cultural values that link local people to nature and migratory mammals; build on traditions and local beliefs that value wildlife and open land and raise pride in community identity and natural heritage.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program
9.2 Share experience in developing and implementing social campaigns and awareness events. See also 1.7 and 3.4.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP
9.3 Strengthen links with the media, and regularly broadcast conservation news and feature success stories.	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP
9.4 Share experience in developing school curricula aimed at increasing knowledge on migratory mammals and promote playful learning (e.g. through establishing wildlife clubs/ Scouts).	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program
9.5 Promote active civil society engagement in conservation (e.g. through encouraging volunteering in support of conservation measures).	CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program

## Issue 10: Protected areas and critical sites

Activity	Synergies with other initiatives/ stakeholders
<p>10.1 Share experience and lessons learnt from revising legislation related to protected area management and promote the review/revision where required to ensure appropriate financing and staff numbers to manage protected areas effectively; harmonize legislation with legislation relevant to natural resource use and livestock management (e.g. guarantee no mining and restrict livestock grazing at critical sites); promote transparent reinvestment of fines in conservation measures. See also 1.2, 2.2 and 3.2.</p>	<p>CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, UNDP, IUCN</p>
<p>10.2 Enlarge or create protected areas to cover critical wildlife habitat; consider seasonally protected areas to support the conservation of mammal migrations/movements; involve local communities in the design of protected areas. See also 5.2, 6.3 and 8.5.</p>	<p>PoWPA, CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program, CBD, UNDP, UNESCO</p>
<p>10.3 Share experience in and training manuals on strengthening protected area management and combine funding to upscale training of and resource provision to personnel of protected areas important for migratory mammals; involve local communities in the management of protected areas. See also, 1.3 and 5.2.</p>	<p>CMS Saiga and Bukhara deer MOU, CMS Argali AP, GSLEP Program</p>

## Abbreviations

ADB	Asian Development Bank
ALTID	Asian Land Transport Infrastructure Development
AP	Action Plan
ASBP	Aral Sea Basin Programme
CACILM	Central Asian Countries Initiative for Land Management
CAMI	Central Asian Mammals Initiative
CAMP4CA	Climate Adaptation and Mitigation Program for Central Asia
CAREC	Central Asia Regional Economic Cooperation
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COP	Conference of the Parties
CPW	Collaborative Partnership on Sustainable Wildlife Management
CSBI	Cross Sector Biodiversity Initiative
CTMA	Chinese Traditional Medicine Association
EATL	Euro-Asian Transport Links
EBRD	European Bank for Reconstruction and Development
ECO	Economic Cooperation Organization
ENVSEC	Environment & Security Initiative
ERCA	Ecosystem Restoration in Central Asia
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FLERMONECA	Forest and Biodiversity Governance Including Environmental Monitoring
GBPP	Green Bridge Partnership Program
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (German Agency for International Cooperation)
GSLEP	Global Snow Leopard and Ecosystem Protection Program
ICWC	International Consortium on Combating Wildlife Crime
ICSD	Interstate Commission on Sustainable Development
IDB	Islamic Development Bank
IFAS	International Fund for Saving the Aral Sea
IMF	International Monetary Fund
INTERPOL	International Criminal Police Organization
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
NAP	National Action Programmes
NBSAPs	National Biodiversity Strategies and Action Plans
NSLEPs	National Snow Leopard and Ecosystem Protection Priorities
MEAs	Multilateral Environment Agreements
MOU	Memorandum of Understanding
MTIWP	Medium Term International Work Programme
NGO	Non-governmental organization
OIE	World Organisation for Animal Health
OSCE	Organization for Security and Co-operation in Europe



PAGE	Partnership for Action on Green Economy
PEBLDS	Pan-European Biological and Landscape Diversity Strategy
PEI	Poverty-Environment Initiative
POW	Programme of Work
PoWPA	Programme of Work on Protected Areas
RAP	Regional Action Programmes
RBSAPs	Regional Biodiversity Strategies and Action Plans
SPECA	Special Programme for the Economies of Central Asia
SPMS	Strategic Plan for Migratory Species 2015-2023
SRAP	Sub-Regional Action Programme
SSC	Species Survival Commission
TRACECA	Transport Corridor Europe-Caucasus-Asia
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WB	World Bank
WICAC	Wildlife Initiative for Central Asia and the Caucasus
WTO	World Trade Organization