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CMS

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DRAFT OVERVIEW REPORT ON THE IMPLEMENTATION OF THE PROGRAMME OF WORK FOR THE CENTRAL ASIAN MAMMALS INITATIVE 2021-2026

(Prepared by Conservation X Labs for the Secretariat)

Summary:

The document offers an overview of the information provided in national reports submitted to the CMS Secretariat as well as additional information available to Conservation X Labs.

Action requested:

CAMI Range States to note the report.

DRAFT OVERVIEW REPORT ON THE IMPLEMENTATION OF THE PROGRAMME OF WORK FOR THE CENTRAL ASIAN MAMMALS INITATIVE 2021-2026

Introduction

1. The Programme of Work (POW) for the Central Asian Mammals Initiative (CAMI) was last updated in 2019 at the Second Meeting of CAMI Range States and adopted by CMS COP13 in 2020 through Resolution 11.24 (Rev. COP13) for the period 2021-2026. The present document provides an overview of the implementation of the CAMI POW 2021-2026 based on reports submitted by Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan to the CMS Secretariat.

2. Paragraph 9 of the Outcomes of the Second Meeting of CAMI Range States, held in Ulaanbaatar in 2019, mandates the CMS Secretariat to request Range States—one year before the end of the current POW cycle (i.e. in 2025)—to submit a concise implementation report outlining their efforts to implement the POW. Based on these reports, the Secretariat is also tasked with providing an analysis and overview of the status of implementation for consideration at the next CAMI Range States meeting, which is to be held prior to COP15.

3. In line with this mandate, the CMS Secretariat developed the reporting template (UNEP/CMS/CAMI3/Inf.1) and circulated it among CMS National Focal Points of CAMI Range States and contacts in non-Party Range States in February 2025, requesting the submission of implementation reports. By 5 May 2025, national reports were received from Mongolia, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. These and any other National reports submitted later are being made available on the official website of the Third Meeting of CAMI Range States. The present Overview Report synthesizes the information provided and makes an analysis of regional progress and implementation gaps against the activities outlined in the CAMI POW 2021-2026 in order to inform the preparation of the updated Programme of Work for CAMI 2026-2031. Activities implemented by the Secretariat are not included in this analysis and can be found in the Secretariat Report (UNEP/CMS/CAMI3/Doc.7).

Conservation status and trends of CAMI Species

4. Below is an overview of CAMI species conservation status and trends, prepared on the basis of the International Union for Conservation of Nature (IUCN) Red List Assessments, overview reports prepared for the meetings of Range States of the Argali, Asiatic Wild Ass, Bukhara Deer and Saiga Antelope, based on information provided in the respective national reports. Not included in this overview is Kiang because no information was provided.

Argali

5. The Argali is currently classified as Near Threatened on the IUCN Red List, as well as listed under CITES Appendix II and CMS Appendix II. Main threats include poaching, competition with livestock, and potentially climate change impacts. However, recent population estimates from several Range States suggest stable or even increasing numbers in some regions, although data quality and survey methodologies vary widely.

6. While there are positive conservation outcomes in some regions, the overall picture remains mixed, with ongoing threats and knowledge gaps that require coordinated, science-based, and transboundary conservation action to ensure the long-term survival of Argali across its range. For detailed information see the Overview Report on the implementation of the International Single Species Action Plan for the Conservation of the Argali (2024)

Asiatic Cheetah

7. The Asiatic Cheetah (*Acinonyx jubatus venaticus*) is listed under the IUCN Red List as Critically Endangered and listed on Appendix I of both CMS and CITES. The Asiatic Cheetah has survived only in Iran. Once widespread across the Middle East and South Asia, its population has plummeted due to habitat loss, road accidents, mining activities, poaching, and declining prey availability. As of May 2025, estimates suggest fewer than 30 individuals remain in the wild, with some reports indicating numbers as low as 26.

8. These cheetahs are primarily found in protected areas such as Turan National Park and Miandasht Wildlife Refuge. While sightings of females with cubs offer hope, the overall trend remains highly concerning. The population is highly fragmented, and several threats, including road collisions, cheetah-livestock conflicts, and habitat encroachment persist.

9. Challenges such as limited funding and international cooperation hinder progress on the implementation of conservation measures. Continued conservation measures and effective strategies are crucial to avoid loss of the species.

Asiatic Wild Ass

10. The Asiatic Wild ass is listed as Near Threatened under the IUCN Red List. The two subspecies, Persian onager and Turkmen kulan, are listed as Endangered and the Gobi khulan and Indian khur as Near Threatened. It is listed under CITES Appendix I (Gobi khulan, Indian khur) and II (Persian onager, Turkmen kulan) and CMS Appendix II.

11. Historically, the Asiatic Wild Ass ranged widely across the steppes and deserts of Central and Western Asia, including parts of Russia, Mongolia, China, India, Iran, and the Middle East. Today, its range has contracted significantly, with autochthonous populations surviving only in Mongolia, China, India, and Iran, and reintroduced populations established in Kazakhstan, Uzbekistan, Turkmenistan, and Israel.

12. The global population is estimated at around 87,000 individuals, with approximately 80% (70,000) found in southern Mongolia, making it the global stronghold for the species. Other populations are much smaller and largely fragmented.

13. Population trends vary by region. While some populations are stable or increasing (e.g., in India, Mongolia's South Gobi, and reintroduction sites in Kazakhstan), others are declining or extirpated. Long-term viability remains a concern due to habitat fragmentation, fencing, limited connectivity between populations, and anthropogenic pressures. For detailed information see the Overview Report on Status and Conservation of the Asiatic Wild Ass across its Range (2023).

Bukhara Deer

14. The Bukhara deer (*Cervus hanglu bactrianus)* is listed as Least Concern under the IUCN Red List and under Appendix II of CITES and Appendices I and II of CMS. It has shown promising signs of recovery. As of 2023, the estimated wild population is between 4,320 and 4,600 individuals, with an additional 160 in captivity across range states. Populations are stable or increasing in most regions, though Afghanistan's figures remain unknown due to security and access issues.

15. Despite the encouraging upward trend, the species continues to face serious conservation challenges. Habitat loss and degradation, driven by agricultural expansion,

infrastructure development, water diversion, and climate change, remain the most significant threats.

16. Additionally, poaching, livestock competition, and predation by stray or feral dogs contribute to localized threats, especially in smaller or recently reintroduced populations. For detailed information see the Overview Report on the Conservation Status and Implementation of the Bukhara Deer MoU (2024).

Gobi Bear

17. The Gobi bear (*Ursus arctos gobiensis*), known locally as the Mazaalai, is not separately assessed under the IUCN Red List; it is listed under Appendix I of CITES and CMS. It is a subspecies of the brown bear uniquely adapted to the harsh conditions of Mongolia's Gobi Desert. This isolated population is confined to the Great Gobi A Strictly Protected Area (GGSPA). Unlike other brown bears, Gobi bears have evolved to survive in arid environments, subsisting primarily on roots, berries, and other desert vegetation, with minimal intake of animal protein.

18. Recent genetic and ecological studies indicate that the Gobi bear population is alarmingly small and genetically impoverished. Long-term DNA-based monitoring from 1996 to 2018 identified only 65 unique individuals, with annual population estimates ranging between 23 and 31 bears.

19. A study by Anile et al (2024) represents the first attempt to estimate the population density of Gobi bears using camera-trapping, providing valuable insights into their springtime activity patterns and sociality. In 2020, researchers deployed 36 camera traps across 35 sites within the Great Gobi Strictly Protected Area (GGSPA) over a three-month period. This effort yielded 68 bear detections. Notably, 53 of these detections originated from a single camera located near a waterhole.

20. These findings underscore the critically low population density of Gobi bears, emphasizing the urgency for targeted conservation efforts. The study provides a critical baseline for future monitoring and conservation strategies, highlighting the importance of waterholes as focal points for Gobi bear activity and the necessity for continued research to inform effective management plans.

Goitered Gazelle

21. The Goitered Gazelle (*Gazella subgutturosa*) is listed as Vulnerable under the IUCN Red List and under Appendix II of CITES and CMS. Once widespread across arid and semi-arid regions of Central and Southwest Asia, it now persists in increasingly fragmented populations. The species is classification as Vulnerable is due to rapid population declines caused by habitat loss, poaching, competition with livestock, and barriers to movement, including infrastructure and fencing.

22. In Kazakhstan, efforts such as drone-based surveys in Altyn Emel and Barsa Kelmes have helped monitor population trends. However, across much of its range, systematic monitoring is inconsistent or lacking, and populations are often assessed through indirect signs or rough estimates, making it difficult to determine exact numbers or detect subtle trends.

23. Across Central Asia, the gazelle shares habitat with other iconic steppe species and benefits from ecosystem-scale conservation projects and programs.

24. Despite these efforts, the overall trend remains concerning. Populations across Central Asia continue to face threats from fencing that obstructs migratory routes and insufficient enforcement of anti-poaching laws. Connectivity between subpopulations is declining, which increases vulnerability to local extinction and reduces genetic diversity.

25. Conservation strategies need to be strengthened through cross-border collaboration, enhanced monitoring protocols, and habitat connectivity measures—especially in light of the growing impact of climate change and infrastructure development across the Gazelle's habitat.

Mongolian Gazelle

26. The Mongolian gazelle (P*rocapra gutturosa)*, or dzeren, is listed as Least Concern under the IUCN Red List and on Appendix II of CMS. It is one of the most abundant large ungulates in Asia, primarily inhabiting the vast steppes of Mongolia, with smaller populations in Russia and China. As of 2024, the global population is estimated at approximately 2.14 million individuals.

27. IUCN currently classifies the Mongolian gazelle as Least Concern. However, the population trend is uncertain, with some studies indicating a decline in mobility over the past 15 years due to increasing human activities.

28. Mongolian gazelles are known for their extensive nomadic movements, which are not strictly seasonal but are influenced by environmental conditions such as food availability and weather. These movements are increasingly hindered by human-made barriers like fences and infrastructure, leading to habitat fragmentation.

29. Key threats to the Mongolian gazelle include illegal hunting, habitat degradation due to agricultural expansion and overgrazing, and the development of infrastructure that disrupts migration routes.

30. During the winter of 2025, the winter range of Mongolian gazelles in Russia's Zabaykalsky Krai was smaller than in the preceding two years possibly due to the favorable conditions in Mongolia. The estimated population dropped to 329,600 individuals—between 100,000 and 200,000 fewer than the average over the previous four winters. This sharp decline was largely attributed to the harsh dzud conditions in 2024, which caused significant mortality, particularly among juveniles born in 2023. In contrast, winter conditions in Mongolia in 2025 were unusually favorable, benefiting all ungulate species across the region (V. Kiriliuk, Pers. Comm., 2025).

Persian Leopard

31. The Persian leopard (*Panthera pardus tulliana*) is currently classified as Endangered on the IUCN Red List, and listed under CITES Appendix I and CMS Appendix II. Key threats include habitat fragmentation, declining prey populations, human-wildlife conflict, illegal taking, and border barriers that hinder gene flow and connectivity.

32. The Persian leopard currently inhabits fragmented and often isolated populations across Central and Southwest Asia.

33. To address substantial losses in range and fragmentation, there has been growing regional and international cooperation in conservation efforts. A CAMI range-wide Strategy for Conservation of the Persian Leopard was adopted in 2022 to harmonize efforts across all range countries. The Persian Leopard Working Group was established as an affiliated partner of the IUCN/SSC Cat Specialist Group to serve as a technical

coordination group for planning and supporting Persian leopard conservation actions, including implementation of the relevant activities of the CAMI Programme of Work and the Strategy.

34. In Afghanistan, ongoing conflict, widespread access to weapons, and political instability have significantly undermined conservation efforts. The recent regime change has led to increased poaching of wild ungulates—key prey for leopards—and weakened law enforcement has further enabled the illegal trade in leopard pelts (Z. Moheb, Personal Communication, 2025)

35. In Kazakhstan, between 2007 and to this date, at least five individual male leopards were reliably recorded in the Mangistau region, having dispersed from neighbouring Turkmenistan.

36. In Turkmenistan, the population in Uly Balkan is growing and becoming more significant for purposes of expansion to the north on Garabogazgol as well connectivity with Kazakhstan. Protected areas play an essential role in protecting the leopards, as do border areas and areas where local communities have accepted some degree of leopard impacts on their domestic animals.

37. In Pakistan, a recent camera-trapping study revealed overlapping habitats between leopards and snow leopards. This study also recorded the highest known elevation for leopard occurrence in Pakistan. The Persian leopard is believed to inhabit areas along the borders with Iran and Afghanistan, but these regions remain largely unexplored and understudied. Weak law enforcement and the barrier effect of border fencing result in further fragmentation of these already fragmented populations (Muhammad Kabir, Personal Communication, 2025)

38. The overall conservation outlook depends heavily on scaling up efforts to expand protected areas, restore connectivity between core patches, and enhance human-leopard coexistence. For more information see the Overview Report on the Status and Conservation of the Persian Leopard across its Range States (2022).

Prezwalski's Horse

39. Przewalski's horse (*Equus ferus przewalskii*), also known as the takhi, once declared extinct in the wild in 1969, made a remarkable comeback through international captive breeding and reintroduction programs. As of 2011, IUCN reclassified Przewalski's horse from Extinct in the Wild to Endangered, reflecting the establishment of self-sustaining populations in its native habitats. The horse is also listed under CITES and CMS Appendix I.

40. Przewalski's horses roam freely in several protected areas, including Hustai National Park and the Great Gobi B Strictly Protected Area in Mongolia. Reintroduction efforts have also expanded to Kazakhstan, where a group of horses was reintroduced in 2024 after nearly two centuries of absence. These initiatives have contributed to a global population of approximately 2,000 individuals, with around 500 living in the wild.

41. Ongoing threats include hybridization with domestic horses, disease transmission, habitat loss, and extreme weather events. The ongoing recovery hinges on habitat protection, genetic management, and community engagement.

Saiga Antelope

42. The Saiga Antelope (*Saiga spp.*) is listed as Near Threatened under the IUCN Red List and under CITES and CMS Appendix II. Encouragingly, most Saiga Antelope populations have positive population trends in recent years. The most significant recovery has occurred in Kazakhstan, particularly in the Ural and Betpak-Dala populations. The Mongolian population has also rebounded from a major die-off in 2016/17. However, mass mortality events caused by disease, harsh winters, droughts, and human-induced barriers to migration and poaching for illegal trade remain a serious risk. These underscore the need for large, resilient populations capable of recovering from sudden declines.

43. Overall, while the conservation outlook for the Saiga Antelope has improved significantly, continued protection, monitoring, and habitat management are crucial to maintain and build on recent gains. For detailed information see the Overview Report on Saiga Conservation Status and Saiga MOU Implementation (2025).

Snow Leopard

44. The Snow leopard (*Uncia uncia or Panthera uncia*), is classified as Vulnerable on the IUCN Red List and listed under CITES and CMS Appendix I. Current estimates suggest a global population ranging between 3,920 and 6,390 individuals, with fewer than 10,000 mature adults. The species inhabits the rugged alpine and subalpine zones of Central and South Asia, spanning 12 countries. China holds the largest share, with approximately 60% of the global population.

45. Snow leopard population trends vary widely across their range, reflecting both regional conservation successes and persistent threats. While some countries report stable or growing numbers, others face ongoing declines. In China, the global stronghold for the species, an estimated 2,500–4,500 individuals remain. India's 2024 assessment counted 718 snow leopards, while Nepal's 2025 estimate reported 397 individuals. Bhutan's 2023 survey identified 134 snow leopards, showing growth since earlier assessments.

46. Central Asian populations are smaller and more fragmented. Kazakhstan hosts an estimated 152–189 individuals as of late 2024, with Kyrgyzstan and Tajikistan supporting populations of roughly 150–250 and 180–220 respectively. In Pakistan, estimates range between 200 and 420, primarily in the country's northern mountain ranges. Afghanistan's 2021 assessment estimated 189–224 individuals, though ongoing conflict limits monitoring. Uzbekistan harbors one of the most vulnerable populations, with an estimated 30 to 120 individuals as of 2025.

47. These figures highlight the uneven distribution of snow leopards and underscore the importance of region-specific conservation strategies and transboundary collaboration.

48. Major threats to snow leopards include poaching for their pelts and body parts, retaliatory killings due to livestock predation, depletion of natural prey, habitat fragmentation from infrastructure development, and climate change.

49. Spurred the by the Global Snow Leopard Ecosystem Program, conservation efforts are underway across most of the snow leopard's range, with most of the countries implementing national action plans.

Urial

50. The Urial (*Ovis vignei*) is currently classified as Vulnerable on the IUCN Red List and listed under CITES and CMS Appendix II. This species inhabits a fragmented range across Iran, Afghanistan, Tajikistan, Turkmenistan, Uzbekistan, Kazakhstan, Pakistan, and northern India, favoring grasslands, open woodlands, cold winter deserts and arid mountain slopes up to elevations of 4,500 meters. The primary threats to Urial include habitat degradation, poaching, competition with livestock, and linear infrastructure development.

51. Conservation initiatives across Central Asia aimed at expanding protected areas and establishing community-based conservancies have had positive impact on the status of the species.

52. Overall, while certain Urial populations show signs of stabilization or recovery, the species continues to face significant threats across its range. Sustained conservation efforts, including habitat protection, anti-poaching measures, and community engagement, are essential to ensure the species' long-term survival.

Wild Camel

53. The wild camel (*Camelus bactrianus* also known as *C. felus*), a species genetically distinct from the domestic Bactrian camel, is Critically Endangered according to the IUCN Red List and listed under CMS and CITES Appendix I. With fewer than 1,000 individuals left globally its survival hinges on both in-situ and ex-situ conservation efforts. Wild camels inhabit the Gobi Desert regions of Mongolia and China, where they are increasingly threatened by habitat loss, climate change, hybridization with domestic camels, and illegal mining activities.

54. Recent research efforts (Adiya Yadamsuren, 2025, unpublished report) have significantly improved the understanding of the wild camel's status and ecology. In Mongolia's Great Gobi A Special Protected Area (GGASPA), extensive camera trap surveys from 2019 to 2021 estimated a population of approximately 664 individuals, making this the most precise population estimate to date for the species in Mongolia. Genetic analysis conducted alongside camera trap studies revealed that about 10% of individuals showed signs of hybridization, a concern for the genetic purity of the species.

55. Cross-border studies and GPS tracking have also demonstrated that wild camel habitats are becoming increasingly fragmented, particularly along the Mongolia-China border. Satellite data from 2024 suggests that suitable habitats are shrinking and becoming more isolated, with camels altering their movements to avoid human disturbances such as mining. Conservationists are advocating for the establishment of a China-Mongolia Transboundary Wild Camel Nature Reserve and the expansion of the Great Gobi A Reserve to better protect the species' habitat and promote genetic exchange across borders.

56. In addition, captive breeding at the Zakhyn Us facility and the recently established Toli Bulag center in Mongolia provide vital insurance populations. These centers are designed to reduce disease risk, prevent hybridization, and support long-term reintroduction and research efforts.

Wild Yak

57. The Wild Yak (*Bos grunniens)* is classified as Vulnerable on the IUCN Red List, with a decreasing population trend. Once widespread across the Tibetan Plateau and adjacent

high-altitude regions, wild yaks are now primarily confined to remote areas in northern Tibet, western Qinghai, and parts of southern Xinjiang in China. Small populations also exist in Ladakh, India. Long thought to be extinct in Nepal, the wild yak was rediscovered in Upper Humla in 2014, with an additional sighting in 2015. Genetic analysis confirmed these animals are closely related to wild yak populations from the northwestern Qinghai-Tibetan Plateau in China (Kusi et al 2021)

58. Current estimates suggest that fewer than 15,000 wild yaks remain, with numbers likely declining due to habitat loss, illegal hunting for meat and trophies, and interbreeding with domestic yaks and cattle. The species is also susceptible to diseases transmitted from domestic livestock.

59. Despite its protection status under national laws in China, India and Nepal, effective conservation requires continued monitoring, habitat protection, and community engagement to address ongoing threats and ensure the survival of the species.

Review of the implementation of the CAMI POW (2021-2025)

Transboundary Cooperation

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***.**

60. *Partially achieved.* Recognizing the imperative for coordinated cross-border management of migratory species, some range States have achieved notable progress. Kazakhstan, Turkmenistan, and Uzbekistan formalized a tripartite Memorandum of Cooperation on the Conservation of the Ustyurt Wildlife ("Ustyurt Memorandum"), a critical habitat for Persian leopard, Urial Sheep, Saiga Antelope, Goitered Gazelle, and Asiatic Wild Ass or Kulan.

61. Bilateral cooperation between Tajikistan and Uzbekistan resulted in the development of a standardized biodiversity monitoring manual for the Zarafshan Valley, coupled with ranger training programs in Tupalang and Shirkent Nature Parks.

62. Turkmenistan and Uzbekistan have initiated the process towards the nomination of the Kugitang Mountains as a UNESCO World Heritage Site, aiming to reinforce the protection of transboundary habitats for Urial Sheep.

63. Kazakhstan, Turkmenistan, and Uzbekistan formalized the Ustyurt Memorandum, a critical habitat for Persian leopard, Urial Sheep, Saiga Antelope, Goitered Gazelle, and Asiatic Wild Ass or Kulan.

64. Bilateral cooperation between Tajikistan and Uzbekistan resulted in the development of a standardized biodiversity monitoring manual for the Zarafshan Valley, coupled with ranger training programs in Tupalang and Shirkent Nature Parks.

65. Since 2011, Pakistan has been an active member of the South Asia Wildlife Enforcement Network (SAWEN) and together with Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Pakistan, and Uzbekistan, has also participated in the Global Snow Leopard and Ecosystem Protection Programme (GSLEP) since 2013. These platforms have enabled Pakistan to engage in multiple cross-border initiatives, particularly in the high-mountain regions shared with neighbouring countries.

66. Pakistan has taken part in regional meetings aimed at developing guidelines on managing linear infrastructure in snow leopard landscapes—an important step in reducing barriers to wildlife movement across borders.

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;

67. *Partially achieved.* The implementation of the recommendations from the Transboundary Hotspots study across CAMI Range States remains in an early stage. One example is the Ustyurt Memorandum.

68. In Mongolia, while the study is not explicitly referenced in national planning documents, many of its recommendations are already being implemented through Mongolia's ongoing international cooperation, protected area management, and regional species initiatives.

b) Partner with and integrate migratory species conservation into relevant MEAs;

69. *Partially achieved.* According to the National Reports, Mongolia, Pakistan, Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan have integrated migratory species conservation priorities—aligned with CMS and CAMI—into the National Biodiversity Strategy and Action Plans (NBSAPs).

c) Explore the possibility to strengthen cooperation between CITES and CMS on CAMI similar to the Joint CITES-CMS African Carnivores Initiative;

70. *Partially achieved.* To date, no formal joint initiative between CMS and CITES on CAMI species has been established. However, there is regional support in principle for strengthening cooperation between the two conventions. Notably, Kazakhstan, Turkmenistan, and Uzbekistan have confirmed that their CITES Management Authorities intend to raise the issue of CMS-CITES cooperation at upcoming meetings.

71. This indicates growing political will among key Range States to explore a joint CMS-CITES framework for CAMI species, similar to the African Carnivores Initiative. Establishing such a platform could enhance coordination on enforcement, trade regulation, and species conservation—particularly for migratory mammals threatened by illegal trade.

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;

72. *Partially achieved.* Several CAMI Range States have actively engaged with ongoing OECM processes, demonstrating growing alignment with CBD and IUCN frameworks to support the conservation of CAMI-listed migratory species.

73. Pakistan held a national workshop on OECMs and ecological connectivity. As a follow-up, the country is developing a national OECM strategy, potentially covering critical migratory corridors.

74. Mongolia has made significant progress, developing a national OECM roadmap in partnership with IUCN and GIZ. Efforts are focused on identifying high conservation

value areas outside the formal protected area system, especially those important for CAMI species in steppe and semi-desert ecosystems.

75. In Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan, the IUCN One Health Central Asia initiative is promoting OECMs, with an emphasis on recognizing areas that support ecological connectivity and human-wildlife coexistence.

e) Promote regular exchange between National Focal Points of CMS and other relevant MEAs.

76. *Partially achieved.* At present, regular exchanges between CMS National Focal Points and those of other MEAs remain limited across most CAMI Range States.

77. Pakistan is the only country that currently holds some level of inter-agency discussions among focal points for CMS, CITES, and other conventions.

78. In other countries—Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan—formalized or systematic coordination mechanisms are lacking. While some *ad hoc* cooperation occurs, there are no institutionalized platforms for routine information sharing or joint planning across MEA focal points.

79. This highlights a significant gap in implementation and underscores the need to establish regular inter-agency dialogue and coordination structures to align national commitments under different biodiversity-related conventions, including CMS, CITES, CBD, and UN Convention to Combat Desertification (UNCCD).

1.3 Implement the recommendations outlined in the Transboundary Hotspots study, specifically

a) Continue the process to highlight priority sites;

80. Partially achieved. See 67-68.

b) Identify stakeholders and crucial actors for all identified hotspots;

81. Partially achieved. See 67-68.

c) Establish working groups for each of the proposed priority sites to elaborate work streams for establishing transboundary cooperation as appropriate;

82. *Partially achieved.* See 67-68.

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;

83. Partially achieved. See 67-68.

f) Review and update the Transboundary Hotspots study for the next CAMI Range State Meeting.

84. *Updated, but does not include newly suggested species Lynx and Palas' Cat, can be accessed here:* https://www.cms.int/en/publication/mapping-transboundary-conservation-hotspots-central-asian-mammals-initiative-0

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;

85. *Partially achieved.* There has been notable progress across CAMI Range States in promoting both formal and informal scientific collaboration, though the level of activity varies by country.

86. Species-specific action plans (e.g., for Saiga Antelope, Persian Leopard, Argali, Kulan, and Bukhara Deer) have served as important platforms for collaboration among scientists, conservationists, and government agencies at national and transboundary levels.

87. Joint workshops, monitoring missions, and scientific forums have been organized under GSLEP, UNEP Vanishing Treasures, Central Asia Climate Adaptation Project (CAMCA) and the IUCN One Health initiative, enabling regional knowledge exchange and cross-border coordination.

88. In Mongolia, Kazakhstan, Kyrgyzstan, and Uzbekistan, researchers have worked together on shared species assessments, including contributions to IUCN Red List reassessments, fostering trust and aligned scientific agendas.

89. Despite these advances, collaboration is still largely project-based and often dependent on external funding. There is a need for more sustained, institutionalized scientific cooperation, including regular scientific working group meetings, joint research programs, and support for early-career researchers across the CAMI region.

b) Encourage cooperation at field and working level on survey, research, monitoring and management as well as for study tours and exchange visits.

90. *Partially achieved.* Joint monitoring and ranger training have been conducted in some CAMI Range States. Examples include Tajikistan and Uzbekistan and coordinated field efforts in Tupalang and Shirkent.

91. Transboundary population surveys have been carried out for Saiga antelope between Kazakhstan and Uzbekistan, and snow leopards by Kazakhstan and Kyrgyzstan.

92. Collaborative research and training exchanges under the GSLEP and IUCN One Health Central Asia initiatives, brought together scientists and conservation staff from CAMI Range States.

1.5 Increase awareness about the benefits of transboundary cooperation among governments and stakeholders.

93. *Partially achieved.* The visibility of CMS and CAMI was significantly enhanced by CMS COP14, hosted in Samarkand, Uzbekistan, which catalyzed regional dialogue and stakeholder engagement on transboundary conservation issues.

94. The 2023 Regional Workshop on Conservation of Migratory Species in Central Asia: effects on transboundary cooperation in protected areas, co-organized with CMS, GIZ, OSCE, and Conservation X Labs, brought together protected area staff, border authorities, and conservation experts. The event highlighted the need for integrated management of cross-border ecosystems and resulted in a joint communiqué calling for multisectoral collaboration, especially concerning the impacts of border fencing on species like Urial, Goitered gazelle, and Kulan.

95. The Ustyurt Memorandum serves as a strong demonstration of political and institutional commitment to shared management of transboundary habitats.

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).

96. *Not explicitly cited.*

1.7. Foster the development of transboundary solutions to facilitate the removal and / or mitigation of border fences.

97. *Partially achieved*. Kazakhstan created 18 wildlife passages in 2023 in the border fences with Turkmenistan and Uzbekistan in Mangistau region, which was expanded to 32 passages in 2024. Camera trap data have confirmed successful use of these crossings by Urial, Kulan, and Goitered gazelles.

98. Mongolia has taken proactive steps by testing fence retrofitting and removal to facilitate wildlife movement, particularly for Asiatic Wild Ass and Mongolian gazelle. The country has adopted wildlife-friendly infrastructure standards and included them in national Environmental Impact Assessments (EIAs).

1.8 Urge all CAMI Range States to become a contracting Party to CMS and CITES.

99. *Partially achieved.* Turkmenistan became a party to CMS in 2021 and a party to CITES in 2025, thus closing the gap in Central Asia.

Illegal Hunting, Possession and Trade

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.

100. *Partially achieved.* Several CAMI Range States have taken significant steps forward, though gaps remain in implementation and coordination. Pakistan, Mongolia, and Uzbekistan are currently engaged in the CMS National Legislation Programme, signaling their commitment to aligning domestic laws with CMS and CITES obligations. These countries have prioritized the revision of their wildlife protection laws and are making efforts to modernize enforcement approaches in line with international standards.

101. Mongolia has updated key laws such as the Law on Fauna and the Criminal Code to address illegal wildlife trade, including online and cyber-enabled trafficking. It has also established a multi-agency wildlife crime unit and regularly conducts joint operations involving environmental inspectors, police, and customs officials. These initiatives are supported by partnerships with the Wildlife Conservation Society (WCS), which helped Mongolia assess and close gaps in its enforcement mechanisms.

102. Uzbekistan has taken practical steps to enhance legal enforcement and public engagement. The government has distributed a nationwide CITES identification manual to customs officers and developed Telegram-based bots to allow citizens to report wildlife crimes easily. This integration of public participation into enforcement systems has strengthened efforts to identify and prosecute environmental violations.

103. Mongolia, Kazakhstan, Pakistan and Uzbekistan have introduced SMART across several protected areas while Kyrgyzstan and Turkmenistan have taken steps further by institutionalizing the use of it.

104. Kyrgyzstan has also trained protected area staff and border guards in wildlife crime detection and response. Pakistan's enforcement model is built around community participation; citizen informant networks, including community wildlife guards, are integrated into national conservation enforcement strategies, especially under its trophy hunting program, which returns a majority of revenue to local communities.

105. Cybercrime and online wildlife trade remain emerging challenges. Mongolia, Kazakhstan, and Uzbekistan are actively monitoring online platforms and have legal provisions in place to tackle digital wildlife trafficking. Mongolia, in particular, has led in recognizing the role of internet-based trade in wildlife crimes and has adjusted its legislation and enforcement practices accordingly.

106. In contrast, Pakistan and some other countries lack formal cybercrime response units specific to wildlife and rely on basic internet surveillance by field officers, which limits their ability to address this growing threat comprehensively.

107. Despite these advances, inter-agency coordination remains a common weakness. Most countries have not established formal, multi-agency task forces that systematically involve police, judiciary, border control, and wildlife authorities in combating illegal trade. While workshops and joint trainings have occurred the lack of institutionalized collaboration mechanisms reduces long-term impact.

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 7.4).

108. *Partially achieved.* Kazakhstan has invested in several institutional training initiatives aimed at protected area staff and law enforcement personnel. These were conducted by the Association for the Conservation of Biodiversity of Kazakhstan (ACBK) and the Okhotzooprom State Enterprise. Trainings have included CITES implementation, wildlife identification, and legal procedures for handling poaching and trafficking cases. Additionally, Kazakhstan organized interagency roundtables to foster cooperation among customs officials, environmental police, and border guards, thereby strengthening institutional responses to wildlife crime.

109. Mongolia demonstrated a comprehensive approach by expanding the SMART Patrol System and delivering advanced ranger training programs focused on crime scene investigation, interviewing techniques, and the identification of illegal wildlife trade. These efforts were reinforced through collaborative workshops that brought together park rangers, environmental inspectors, border control officers, and police. Mongolia has also recruited local herders to serve as community rangers, a move that has increased coverage in buffer zones and enhanced cooperation between local communities and government agencies.

110. Uzbekistan has prioritized capacity-building by enhancing customs enforcement and engaging civil society. In 2024, the country hosted two significant workshops with support from Fauna & Flora. The first—focused on criminal profiling—helped enforcement agencies understand and disrupt wildlife trafficking networks, while the second emphasized the application of social science methods for gathering intelligence and engaging communities in enforcement. These trainings were complemented by the

distribution of CITES identification manuals and the development of public engagement tools such as Telegram channels for wildlife crime reporting.

111. Tajikistan participated in joint ranger training programs with Uzbekistan in the Zarafshan Valley, which included the development of a biodiversity monitoring manual and practical enforcement training in Tupalang and Shirkent protected areas The country also equipped its rangers with modern surveillance technologies to improve monitoring and detection capabilities. Kyrgyzstan has emphasized the recognition of outstanding rangers and hosted a Regional Workshop on Combating Illegal Wildlife Trade in 2023, bringing together stakeholders from Kazakhstan and Uzbekistan, and international partners to share best practices and enhance enforcement coordination.

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).

112. *Partially achieved*. SMART is used by Kazakhstan, Mongolia, Kyrgyzstan, Turkmenistan, Pakistan, and Uzbekistan to strengthen enforcement and monitoring in protected areas. Kazakhstan, and Kyrgyzstan also use wildlife detection dogs.

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).

113. *Partially achieved.* Mongolia has institutionalized regular collaboration between environmental inspectors, police, customs officers, border control, and the judiciary. These agencies jointly participate in anti-poaching operations, legal workshops, and environmental crime case management processes, helping to build a shared understanding of enforcement protocols and legal follow-up procedures.

114. Pakistan has established a multi-stakeholder enforcement platform through its CITES Management Authority, which includes representatives from federal and provincial wildlife departments, NGOs, and civil society. This structure enables coordinated decision-making and supports enforcement of CITES regulations. Pakistan further engages in the South Asia Wildlife Enforcement Network (SAWEN), a regional platform that enhances cross-border collaboration on combating wildlife crime. Functional cooperation between customs, police, and wildlife departments has been reported, though it remains largely project-based and varies in consistency.

115. Uzbekistan has focused on building technical capacity among enforcement agencies, especially customs officers, through regular workshops and training sessions organized by the Ministry of Ecology. These efforts aim to improve the control of international trade in CITES-listed species. In 2023, Uzbekistan produced an illustrated identification manual of protected species for customs use, which has improved the accuracy and efficiency of border inspections.

2.5 Promote information exchange mechanisms across range, transit and consumer states to counteract illegal hunting, possession and trade and, inter alia, ensure adequate information is available on trophy hunting regulations.

116. *Minimally achieved.* While Pakistan reports a system that includes mechanisms for monitoring compliance and sharing relevant data with international partners, most other CAMI Range States report limited or no structured mechanisms for cross-border information sharing, especially in relation to illegal wildlife trade. While Mongolia participates in collaborative enforcement activities, they lack formal systems or platforms

specifically designed to facilitate real-time exchange of enforcement data or regulatory information on trophy hunting. This gap hinders timely coordination between enforcement agencies, customs, and CITES authorities across borders.

117. Similarly, there is no evidence of a region-wide database or communication platform that supports coordinated action among Range States, transit countries, and consumer markets. This impedes efforts to address the full supply chain of wildlife crime and undermines the enforcement of international trade regulations.

2.6 Secure support by local communities for addressing illegal hunting, possession and trade through outreach and development of "citizen/informant networks".

118. *Partially achieved.* In Mongolia, community-based wildlife monitoring, volunteer ranger programs, and pasture user groups (PUGs) play a central role in surveillance and reporting of illegal activities, particularly in remote areas and buffer zones around protected areas. These initiatives are complemented by conservation incentive agreements and environmental education campaigns, which together build trust and encourage proactive participation in conservation. Citizen informant networks have become an effective tool for real-time reporting, contributing to more responsive enforcement efforts.

119. Pakistan similarly recognizes and leverages the role of community informants within its broader community-based conservation framework. Through its trophy hunting programme, communities are directly involved in wildlife protection and benefit from conservation-related revenue, creating a strong incentive for enforcement cooperation. Local wildlife guards and watchers assist government departments in monitoring, patrolling, and reporting poaching incidents, making these networks a key part of Pakistan's enforcement strategy.

120. Uzbekistan's Telegram bots allow citizens to upload photos, videos, and location data to report violations of environmental laws. This system has proven effective in mobilizing public support and facilitating quick enforcement responses, particularly in areas where formal patrol presence may be limited.

121. In Tajikistan, hunters sometimes provide information about illegal activities, contributing informally to enforcement efforts. Kyrgyzstan has highlighted examples of community organizations such as 'Ak-Bulun Eco' and the Kөrөy' community that actively assist with wildlife protection in their regions, in addition to the large network of community-based conservancies that include Shumkar Tor, Alatoo Bugu and Jashyl Oroon.

122. Expanding outreach, formalizing community roles in enforcement, and ensuring that benefits from conservation are equitably shared remain key to securing long-term local support.

2.7 Promote cooperation between relevant agencies to improve access to and take action against illegal hunting, possession and trade information on the internet.

123. *Partially achieved.* Mongolia has established legal frameworks that explicitly address online trade in endangered species, including provisions in the Law on Fauna, Law on Foreign Trade of Rare Animals and Plants, and the Law on Advertisements, all of which regulate or prohibit digital sales of protected species. A specialized wildlife crime unit has been created that includes monitoring online platforms as part of joint enforcement operations. In collaboration with WCS and Legal Atlas, Mongolia has also conducted legal assessments to identify gaps in enforcement related to cybercrime and updated its policies accordingly.

124. Uzbekistan has also made operational advances in tackling online wildlife crime. The country has conducted “control purchases” of wildlife advertised for sale on the internet, which are then used as the basis for investigations and prosecutions. This practical, enforcement-driven approach has improved the ability of authorities to track and penalize offenders operating through online platforms.

125. Kazakhstan, through the efforts of ACBK, carries out systematic monitoring of internet advertisements for the sale of wildlife and their derivatives. When illegal activity is detected, the information—including the content and contact details—is forwarded to the environmental police for action. This cooperation between NGOs and law enforcement represents a functional model of civil society engagement in cybercrime enforcement.

126. In Pakistan, while there is no formal unit or legal mechanism dedicated specifically to monitoring online wildlife trade, some surveillance is conducted informally by field staff. When violations are identified, action is taken under existing wildlife protection laws. However, this response remains *ad hoc* and largely dependent on individual staff initiative, highlighting a need for more structured coordination between wildlife authorities and cybercrime enforcement units.

127. Kyrgyzstan and Turkmenistan reported similar monitoring activities, though these are described in general terms and appear to lack institutional frameworks or dedicated inter-agency collaboration.

2.8 Foster and promote community and incentive-based approaches to combat the underlying causes of illegal hunting (see also section 5).

128. *Partially achieved.* Pakistan and Kyrgyzstan have developed some of the most advanced community-based conservation models in the region. In Pakistan, the trophy hunting programme serves as a cornerstone of its approach. Through this program, local communities receive 80% of the revenue generated from licensed hunts of species like Urial sheep. This financial incentive has helped transform communities from poachers into stewards of wildlife. Alongside hunting revenue, Pakistan promotes diversified livelihood options—including ecotourism, and conflict mitigation schemes such as predator-proof corrals and livestock insurance—which reduce dependence on illegal hunting and foster support for conservation.

129. Kyrgyzstan, through support from Ilbirs Foundation, Camp Alatoo, NABU, and Snow Leopard Foundation, similarly integrates communities into wildlife governance through participatory management structures, local conservancies, and sustainable livelihood schemes. Communities are directly involved in monitoring and protection efforts, especially for Argali and Snow Leopard. The recognition and engagement of local people as active participants in conservation have built a strong foundation for community support and reduced illegal hunting pressure.

130. Mongolia also employs a range of incentive-based mechanisms. These include conservation agreements with herder groups, community ranger programs, and support for sustainable cashmere production in Snow Leopard habitats. Local people benefit from training, small grants, and market access for eco-friendly products, all of which link their well-being to the success of conservation outcomes.
131. Tajikistan was one of the first Central Asian countries to pioneer successfully the community-based conservation model, but it has faced political challenges to continue supporting it.

132. Uzbekistan has initiated some ecotourism and community engagement activities, but lacks structured, incentive-based conservation models or revenue-sharing systems.

While community rangers and Friends of Conservation groups exist in some areas, broader community roles in wildlife governance remain informal or limited. Turkmenistan promotes environmental awareness but has no formal community conservation structures in place.

Industry and Infrastructure Development / Barriers to Movement

3.1 Continually update and further develop the Central Asian Mammals Migration and Linear Infrastructure Atlas, specifically

a) Include the whole CAMI region to cover countries that have not yet been considered;

b) Integrate the most up-to-date and accurate information available to further refine the information and maps contained in the Atlas (see 3.2);

c) Develop the Atlas into an interactive online tool that is easy to access and used by decision-makers, infrastructure developers, investors and other relevant stakeholders,

d) Establish a working group to support the maintenance and further development of the Atlas, its dissemination and the raising of necessary funding.

133. This is being done in the frame of the Central Asian Mammals and Climate Adaption Project and will be completed by the Third Range States Meeting to CAMI

3.2 Update and standardize geographical information knowledge about species and landscapes necessary to inform risk management strategies of infrastructure developers and investors, specifically:

a) Update and develop where necessary:

i. common standards for GIS and maps;
ii. distribution maps (layers) per country per CAMI species;
iii. maps of key areas and nationally and internationally designated important areas such as protected areas, Key Biodiversity Areas (KBAs), and OECMs, as well as areas of importance for community-based sustainably used natural resources;
iv. species-specific connectivity and corridor maps;
v. layers on existing and planned potential barriers;

b) Develop species-specific factsheets (including behaviour, ecology, key ecological needs);

c) Integrate the information into the CAMI Atlas and the process outlined under 3.1;

d) Identify knowledge gaps and initiate targeted applied research.

134. *Partially achieved.* Kazakhstan and Mongolia have made substantial national-level contributions toward improving geospatial data compilation. Kazakhstan has conducted detailed landscape-level assessments to evaluate the impact of infrastructure on Saiga antelope and has proposed wildlife crossing designs based on mapped migration routes. Similarly, Mongolia has developed and adopted wildlife-friendly infrastructure standards and has mapped critical habitats, corridors, and migration routes for Asiatic Wild Ass, Mongolian Gazelle, and Argali. These efforts include geospatial layers data showing barriers like roads and fences, as well as connectivity analyses to inform infrastructure planning.
135. In the frame of the Central Asia Mammals and Climate Adaptation Project (CAMCA), Kyrgyzstan, Kazakhstan and Tajikistan have developed maps for Bukhara Deer, Argali and Snow Leopard showing also linear infrastructure.

136. The development of common GIS standards and harmonized distribution maps for CAMI species across all Range States has not yet been achieved. Additionally, maps of Key

Biodiversity Areas (KBAs), protected areas, OECMs, and other zones of ecological importance are not yet comprehensively integrated into a shared regional platform.

137. The integration of species-specific connectivity and corridor maps, as well as layers on existing and planned infrastructure barriers, remains partial. While some maps exist at the country level, they are still to be included in the CAMI Atlas.

138. In terms of species-specific factsheets—covering behaviour, ecology, and key ecological needs— some are available, developed under specific projects, but not as a result of a CAMI wide project.

139. Efforts to identify knowledge gaps and initiate targeted applied research are ongoing but not consistently synthesized or shared at the regional level.

3.3 Develop horizon scanning approaches to enable CAMI partners to look at trends in investment and determine where future infrastructure development is likely to occur, in order to be able to tackle it at the early planning stage, specifically

a) Compile information from multi-sectoral spatial planning and climate change impact modelling;

b) Promote discussions with infrastructure development stakeholders to understand their information requirements when developing risk management plans.

140. *Minimally achieved.* Efforts to anticipate future infrastructure pressures through multi-sectoral spatial planning or climate change impact modelling have been conducted on a limited, mostly national scale, and are not yet systematically compiled or used to inform risk management planning for migratory species.

141. Mongolia has conducted research on how infrastructure and climate change affect habitat connectivity and species movement, particularly for the Asiatic Wild Ass and Mongolian Gazelle. These studies have informed the development of wildlife-friendly infrastructure standards, now incorporated into Environmental Impact Assessments (EIAs). However, there is no indication that Mongolia has yet linked this work to a broader foresight or horizon scanning mechanism.

142. Kazakhstan has also piloted landscape-level assessments for infrastructure development during the reconstruction of the Karaganda–Zhezkazgan highway, where specific impacts on Saiga migration were evaluated.

143. There is currently no evidence of structured engagement with infrastructure development stakeholders across the region to understand their information needs or to co-develop risk management tools. Pakistan and Uzbekistan have hosted national workshops that brought together government and development sectors to discuss linear infrastructure and ecological connectivity.

3.4 Increase awareness and knowledge sharing on barriers to migration, specifically:

a) Publicize information to the broad public on the benefits from migratory species, the environmental and socio-economic costs of poorly planned infrastructure and possible solutions to encourage citizen engagement and empowerment;

b) Promote using the CAMI Migration Atlas to inform governments, developers, environmental impact assessments (EIA) groups and other relevant stakeholders when planning infrastructure projects and developing risk management strategies (see 3.1);

c) Raise awareness of the impact and mitigation options to planners and infrastructure industry thereby influencing the location and design of infrastructure to minimize their impacts;

d) Encourage decision makers to mainstream sustainable landscape management into key economic sector planning.

144. *Partially achieved.* Some countries have taken meaningful steps to engage the public and raise awareness about the importance of migratory species and the threats posed by poorly planned infrastructure. Mongolia has conducted national media campaigns and public outreach focused on wildlife movement and the need for wildlife-friendly infrastructure, particularly in the context of the Asiatic Wild Ass and Mongolian Gazelle. These efforts have included educational programming, stakeholder workshops, and the promotion of national infrastructure standards that incorporate wildlife connectivity considerations.

145. In Kazakhstan, the creation of wildlife passages in the border fences, supported by BRCC, ACBK and Conservation X Labs, was publicized through camera trap footage and collaborative initiatives and helped illustrate both the problem and the solution to barriers posed by linear infrastructure. This has served to increase citizen understanding of the practical benefits of ecological connectivity and the socio-environmental costs of habitat fragmentation.

146. Similarly, the 2023 meeting in Ashgabat, Turkmenistan, organized by CMS together with OSCE, GIZ, the Ministry of Environmental Protection of Turkmenistan and Conservation X Labs, highlighted the environmental impacts of linear infrastructure on migratory species and emphasized the importance of integrating wildlife-friendly designs into infrastructure planning. The meeting played a pivotal role in raising awareness and promoting strategies to mitigate the adverse effects of infrastructure on wildlife migration routes.

147. The CAMI Migration Atlas has not yet been fully developed or actively used in awareness campaigns. As a result, its potential to shape infrastructure risk planning and influence design decisions remains largely untapped.

148. Furthermore, structured engagement with planners, developers, and infrastructure industry stakeholders has been sporadic. While Pakistan and Uzbekistan have hosted workshops on ecological connectivity and linear infrastructure, these initiatives are not yet institutionalized, nor do they systematically influence project planning and approval processes. Awareness of mitigation measures—such as underpasses, corridor preservation, or fence modifications—is increasing, but uptake in infrastructure design remains slow and highly dependent on external donor support or pilot initiatives.

149. Lastly, the mainstreaming of sustainable landscape management into broader economic and development planning is still in its early stages. Although several Range States recognize the importance of integrating biodiversity into national strategies—such as through protected area expansion or land-use planning—specific efforts to embed connectivity and migratory species conservation into transport, energy, and mining sector plans remain limited.

3.5 Promote the knowledge and application of mitigation solutions implemented in the CAMI region, specifically:

a) Compile the available information on mitigation solutions for specific cases, species, landscape and type of barrier in the CAMI region;

b) Include and update information about mitigation measures and hierarchies in the CAMI Atlas (see 3.1);

c) Document and monitor impacts and effectiveness of mitigation solutions and update accordingly the mitigation hierarchy guidelines;

d) Engage academics to incorporate mitigation measure in relevant study courses (e.g. civil engineering);

e) Make maps (GIS) available at national, bilateral and regional level (see 3.2);

f) Mitigate the impacts of existing or unavoidable linear infrastructure where feasible and following the mitigation hierarchy (avoid, minimize, mitigate, offset).

150. *Partially achieved.* Mongolia and Kazakhstan are leading in the implementation and documentation of mitigation measures. Mongolia has developed and adopted national wildlife-friendly infrastructure standards (e.g., MNS 6515:2015, MNS 7042:2024), which are now incorporated into EIAs and applied to roads, railways, and other developments. These standards reflect a clear application of the mitigation hierarchy—avoid, minimize, mitigate, and offset—and include design elements such as underpasses and fence modifications aimed at restoring connectivity for the Asiatic Wild Ass and Mongolian Gazelle. Mongolia has also tested and monitored retrofitting projects to evaluate their effectiveness, and these findings are helping to refine its national guidelines.

151. Kazakhstan has similarly piloted mitigation measures for existing infrastructure, particularly in Saiga Antelope migration areas. One example is the landscape-level assessment conducted during the reconstruction of the Karaganda–Zhezkazgan highway, which led to species-specific wildlife crossing designs. In the Mangistau region, Kazakhstan, in collaboration with BRCC, ACBK and Conservation X Labs, created 18 ungulate passages along border fences in 2023, later expanded to 32 in 2024. Camera trap monitoring has confirmed their successful use by Goitered Gazelle, Urial, and Kulan, providing valuable data on the effectiveness of these interventions.

152. There is currently no centralized compilation of mitigation case studies or best practices across the CAMI region. The CAMI Atlas, which is intended to house and disseminate such information, has not yet been updated to reflect these developments.

153. There is also no formal system for monitoring and evaluating the long-term effectiveness of mitigation measures at a regional scale. Although Mongolia and Kazakhstan are tracking some outcomes, these efforts are not standardized or coordinated across Range States, and there is no regional platform to update mitigation hierarchy guidelines accordingly.

154. Engagement with academic institutions to incorporate mitigation strategies into relevant curricula—such as civil engineering or environmental planning—has not been widely reported.

155. In terms of GIS and mapping, while some countries have developed detailed spatial layers of infrastructure and ecological corridors, these are not yet consolidated or made consistently available at bilateral or regional levels.

156. Finally, while some mitigation of existing infrastructure has occurred, these efforts are still limited in scale and often reliant on donor support.

3.6 Engage with governments, financial organizations and companies developing infrastructure, specifically:

a) Develop and implement national infrastructure mitigation standards using the CMS infrastructure guidelines for Central Asia;

b) Encourage national and bilateral multi-agency consultation on border fences (including border security agencies, customs, ministries of foreign affairs, environmental / wildlife agencies and transboundary protected areas), where feasible;

c) Establish national multi-agency task force on big infrastructure projects (i.e. transportation and other relevant ministries);

d) Integrate migratory species conservation into national EIA regulations and implementation as well as into the requirements of international financing institutions;

e) Engage with lender / finance organizations and governments and urge them to make CAMI species-friendly infrastructure planning mandatory, and the application of EIAs standard criteria for migratory species for approval of proposed investments obligatory;

f) Urge companies that develop infrastructure in target landscapes to adopt best practices in line with CMS infrastructure guidelines and allocate funds for conservation as part of their mitigation or off-setting plans;

g) Encourage adherence to International Finance Corporation Performance Standard 6 (IFC PS6) and other existing international standards in relation to all planned developments.

157. *Minimally achieved.*

158. Kyrgyzstan reports having established interagency working groups to assess the impact of major infrastructure projects. For example, as part of the Programme for the creation and development of the National Spatial Data Infrastructure (NSDI), an interdepartmental working commission responsible for coordinating the activities of various government agencies and organisations in the field of spatial data was formed.

159. In addition, in Kyrgyzstan, environmental and social impact assessments are carried out during the preparation and implementation of major infrastructure projects, such as the rehabilitation of the Tyup-Kegen motorway. Representatives of various government agencies, including the Ministry of Transport and Communications, the Ministry of Ecology, and local authorities are involved in these processes. This interagency cooperation facilitates an integrated approach to assessing and minimising the environmental and social impacts of infrastructure projects.

160. Uzbekistan reports that prior to the implementation of large infrastructure projects, a mandatory EIA is carried out. This process involves analysing the potential impact of the project on ecosystems and biodiversity, as well as developing mitigation measures. For example, in the Rural Road Resilience Enhancement: Syr Darya project, an initial environmental assessment was conducted, considering the impact on local ecosystems and proposing measures to mitigate negative impacts on wildlife.

161. Currently, there is no comprehensive, region-wide database or compilation of mitigation solutions by species, landscape, or barrier type. Similarly, the systematic monitoring of mitigation impacts—necessary to update the mitigation hierarchy—is not standardized across the region and depends on individual national initiatives.

162. No CAMI Range State has reported systematic engagement with lenders or finance organizations to require CAMI species-friendly infrastructure planning as a condition for funding.

163. There is also no evidence of binding requirements on infrastructure developers—public or private—to adopt CMS infrastructure guidelines or to commit financial resources to biodiversity conservation or habitat offsets.

164. Similarly, adherence to international standards such as the International Finance Corporation's Performance Standard 6 (IFC PS6) while reported is not necessarily enforced. There are currently no formal mechanisms in place across CAMI countries to ensure compliance with IFC PS6 or similar international guidelines in infrastructure development projects.

Overgrazing and Livestock Competition

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.

165. *Partially achieved.* Kazakhstan has conducted extensive studies on pasture productivity, seasonal pasture use, and grazing impacts—particularly in habitats shared by livestock and Saiga and Argali. Research has also explored the role of standing herds as economic assets, the feasibility of traditional pastoralism, and how climate change influences rangeland dynamics. While this research base is strong, the integration of findings into national pasture governance and species conservation strategies remains uneven.

166. Mongolia has similarly prioritized grazing and rangeland management in relation to CAMI species. Through programs such as the Green Gold Project, the country has implemented community-based and voluntary rangeland use agreements in the Eastern Steppe and South Gobi. These initiatives are supported by studies on grazing pressures, competition between livestock and wildlife (e.g., Asiatic Wild Ass and Mongolian Gazelle), and the role of climate variability in pasture degradation. Mongolia has also assessed the implications of rangeland use on soil carbon dynamics, though more work is needed to connect these findings directly to species-specific conservation planning.

167. Pakistan shows a relatively strong applied research base, particularly in the mountainous regions where livestock–wildlife conflict with Snow Leopards is a priority issue. Studies have examined pasture use patterns, human-wildlife interactions, and climate impacts, often in the context of donor-supported conservation programs. The results have informed practical interventions such as predator-proof corrals, community insurance schemes, and conflict mitigation tools. However, broader studies on herd economics, soil carbon sequestration, or disease transmission between livestock and wildlife remain limited.

168. Kyrgyzstan has engaged in research on seasonal grazing patterns, human-wildlife conflict, and traditional pastoralism, especially in high-altitude habitats of Snow Leopards and Argali. Some pasture committees have been formed to manage grazing, but their effectiveness outside protected areas is constrained by weak mandates and limited data integration into policy. Research on livestock-transmitted diseases or the broader ecological impacts of grazing is still lacking.

169. In Tajikistan, studies on pasture use and grazing pressure in protected areas—particularly for Argali and Bukhara Deer—exist but are fragmented and poorly disseminated. Although the country has adopted a national pasture development

program (2023–2027), it lacks a strong evidence base directly linking rangeland management with CAMI species conservation.

170. Uzbekistan has conducted targeted research under the framework of its 2019 Law on Pastures, including carrying capacity assessments, seasonal usage, and grazing impacts, especially in sensitive regions like the Ustyurt Plateau. The country has also begun to assess the role of climate change in pasture degradation, though broader ecosystem-based studies remain limited.

4.2 Review and modify existing grazing norms (both legal and customary) based on carrying capacity and critical wildlife habitat (see also 6.2).

171. *Minimally achieved*. Uzbekistan has implemented the Law on Pastures (2019), which requires carrying capacity assessments and the development of sustainable pasture management plans. This framework has led to studies on grazing impacts in ecologically sensitive areas, such as the Ustyurt Plateau, where grazing overlaps with habitats of key CAMI species like the Goitered Gazelle and Asiatic Wild Ass. While implementation remains in progress, this law represents an important step toward aligning legal grazing norms with ecological sustainability.

172. Kazakhstan has conducted geobotanical assessments of pasture productivity and seasonal use patterns, particularly in regions where grazing intersects with Saiga and Argali ranges. However, while this research has generated useful data, there is no clear indication that legal or customary grazing norms have been systematically revised based on ecological carrying capacity or the specific needs of migratory species. The application of findings to on-the-ground governance remains limited.

173. Mongolia has adopted voluntary community-based grazing management tools, such as Rangeland Use Agreements (RUAs), in the Eastern Steppe and South Gobi. These mechanisms are designed to reduce pressure on critical wildlife corridors during key migration and calving periods. However, they are not legally binding and rely on technical support and incentives rather than formal regulatory enforcement. While Mongolia recognizes the need to address overgrazing, broader legal reforms to regulate grazing based on ecological limits have yet to be fully enacted.

174. In Kyrgyzstan, an economic analysis termed Targeted Scenario Analysis (TSA), commissioned by UNEP's Vanishing Treasures programme, compared the economic impact of two agricultural scenarios: the ongoing 'Business-as-Usual' dominant farming methods which is highly vulnerable to climate change and already experiencing decreasing economic returns, with a Sustainable Ecosystem Management scenario in which climate-smart agriculture integrates sustainable farming practices to address climate challenges. This study is supporting a policy shift as well as ongoing grazing norms, with some community-based conservancies already choosing to reduce their grazing herds.

175. Pasture committees have also been established to manage seasonal grazing, including in Snow Leopard and Argali habitats. Temporary grazing restrictions have also been implemented in certain corridors. However, these efforts are often localized and lack strong legal authority or consistent application across the country. There has been limited movement toward national-level reform of grazing norms to explicitly consider wildlife habitat needs.

176. In Tajikistan, a national pasture development program (2023–2027) is in place, but there is little evidence that it incorporates ecological carrying capacity or wildlife habitat sensitivity into its guidelines. Grazing regulations remain largely disconnected from

species conservation priorities, and reforms to customary grazing practices have not been reported.

177. Turkmenistan and Pakistan have not reported specific efforts to review or modify existing grazing norms in line with CAMI objectives. In Pakistan, community-based conservation models have helped mitigate some conflict between livestock and wildlife, but there is no indication of formal legal reform addressing grazing impacts on critical habitats.

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.

178. *Minimally achieved.* Mongolia has taken initial steps in this direction by promoting sustainable livestock value chains, particularly in regions critical for migratory species. In Snow Leopard and Argali habitats, Mongolia supports initiatives such as sustainable cashmere production, which aims to reduce herd sizes while improving income through higher-quality fiber. These programs also tie in with community-based conservation agreements, offering herders both financial and ecological incentives to reduce grazing pressure on sensitive ecosystems. However, broader mechanisms—such as national policies to shift livestock investment strategies or breed improvement programs—are not yet systematically developed or widely implemented.

179. Pakistan has introduced livelihood diversification strategies in tandem with conflict mitigation that encourage more sustainable herd management. However, the focus remains more on reducing conflict than explicitly promoting livestock quality improvements through breeding or added-value processing.

180. In Kazakhstan, research on herd economics and pasture suitability has been conducted, particularly in relation to traditional pastoralism and standing herds as investments. However, this research has not yet translated into concrete policy measures or incentive mechanisms to promote investment in livestock quality over quantity.

181. Kyrgyzstan, Tajikistan, and Uzbekistan have not reported any formal mechanisms or programs designed to shift livestock production toward quality over quantity.

4.4 Develop and promote awareness and educational programmes among herding communities on wildlife protection, conflict resolutions, and the unintended impact of livestock intensification.

182. *Partially achieved.* Mongolia has integrated environmental education and outreach into its community-based conservation model, particularly in regions home to CAMI species. Educational efforts include training for herder groups on sustainable grazing practices, wildlife monitoring, and the impacts of fencing and habitat fragmentation. Mongolia also runs school programmes, public awareness campaigns, and species celebration days (e.g., Saiga Day), helping to build intergenerational support for wildlife protection and ecological stewardship. These initiatives are often linked to conservation incentive agreements, which reinforce messages through tangible benefits.

183. Pakistan also engages herding communities through its community-based trophy hunting programmes, where revenue-sharing models are coupled with outreach on the importance of protecting species such as Urial and Snow Leopard. The government supports community wildlife clubs, provides training on conflict mitigation tools (such as predator-proof corrals), and promotes coexistence through education about the ecological role of predators and the risks of retaliatory killing. These programs have

proven successful in building local support for conservation and reducing livestock-wildlife conflict.

184. Kyrgyzstan promotes similar awareness efforts across the country where local communities are involved in conservation activities. Events such as Snow Leopard Day and environmental education through community associations have helped to raise awareness about human-wildlife coexistence and the need to reduce overgrazing and conflict. However, educational efforts around the unintended consequences of livestock intensification—such as habitat degradation and disease risks—remain limited.

185. In Uzbekistan, community outreach is emerging through wildlife clubs and citizen engagement tools, including Telegram bots for reporting environmental violations. While these tools enhance public involvement, there is no clear indication of structured educational programs targeting herders with content focused on wildlife-livestock interactions or the long-term ecological risks of intensifying herd production.

186. In Kazakhstan, ACBK established working groups with herding communities in Zhongar Alatau (in the context of the CAMCA project) and NABU in the Ustyurt to discuss coexistence with argali and saiga, respectively. In relation to saiga antelope, the country has established working groups at the national level with the involvement of relevant stakeholders.

187. In Turkmenistan, the Ministry of Environmental Protection with Team Bars Turkmenistan and Mert NGO, actively engage with herding communities in the Ahal and Balkan velayat and support them with outreach materials and human-carnivore conflict mitigation tools.

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.

188. *Partially achieved.* Mongolia has introduced some of the most structured approaches in this area. In landscapes where overgrazing threatens migratory species, Mongolia has implemented voluntary RUAs as described in paragraph 185. Mongolia also promotes sustainable livestock value chains, such as eco-certified cashmere, which encourage herders to reduce herd sizes while increasing income through higher-value production.

189. Pakistan addresses the issue through livelihood diversification, particularly in its community-based conservation areas. Herders are supported in developing alternative income streams like eco-tourism, beekeeping, handicrafts, and fruit processing, which reduce economic reliance on large herd sizes. While not always explicitly focused on reducing livestock numbers, these programs help shift community priorities toward more sustainable asset management and reduce pressure on rangelands that overlap with Snow Leopard and Urial habitats.

190. In Kyrgyzstan, Ilbirs Foundation and the Snow Leopard Foundation, have in the frame of the UNEP Vanishing Treasures project, piloted conservation interventions, such as beekeeping, fruit orchards, livestock vaccination) to support income desertification and voluntary reduction in grazing herds.

191. Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan have not reported introduced concrete programs to reduce herd numbers or promote alternative strategies among herding communities.

4.6 Establish joint working groups with relevant organizations, including pastoralist communities, to address pasture use and wildlife protection issues.

192. *Partially achieved.* Mongolia has facilitated collaboration between herder groups, conservation NGOs, local governments, and protected area administrations. These partnerships support the development of RUAs. While not always formalized as "working groups," these collaborative arrangements function effectively as platforms for joint decision-making and resource management.

193. Kyrgyzstan has introduced pasture committees in some regions, particularly in areas overlapping with Snow Leopard and Argali habitats. These committees include local herders and are tasked with managing grazing schedules and resolving conflicts over rangeland use. In some cases, they have cooperated with conservation organizations and government agencies. However, their scope remains localized, and they lack the broader institutional mandate or coordination mechanisms needed to systematically address wildlife protection in tandem with pasture governance.

194. In Pakistan, strong community engagement exists through wildlife conservation committees and community-based trophy hunting programmes, which bring together local stakeholders, NGOs, and government authorities. These platforms often address issues related to habitat degradation and human-wildlife conflict, particularly in northern mountainous regions. However, they tend to focus more on enforcement and benefit-sharing than on holistic pasture management and are not structured as joint working groups dedicated specifically to pasture-wildlife coordination.

195. Kazakhstan has established Saiga antelope working groups at the national level with the involvement of relevant stakeholders.

196. In Uzbekistan, Tajikistan, and Turkmenistan, there is no clear evidence of joint working groups involving pastoralists, conservation actors, and government agencies to collaboratively manage pasture use and wildlife protection.

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).

197. *Partially achieved.* In Mongolia, particularly in and around protected areas and migration corridors of CAMI species such as the Mongolian Gazelle, Argali, and Asiatic Wild Ass, local herders are recruited and trained as community rangers. These rangers participate in wildlife monitoring, patrolling, and enforcement support, often using tools such as SMART. Incentives include modest stipends, training opportunities, and public recognition, and the program is frequently supported through partnerships with NGOs and donor-funded conservation projects. The integration of traditional knowledge and local stewardship has enhanced the effectiveness and legitimacy of conservation efforts in these landscapes.

198. Pakistan also supports community-based ranger models as part of its community-led trophy hunting programmes, particularly in northern regions. Community wildlife guards, drawn from local populations, are involved in surveillance, anti-poaching activities, and species monitoring, and are compensated through conservation-linked revenues. These positions serve not only as enforcement support but also as a means of local empowerment, creating tangible incentives for communities to protect the Snow Leopard and Urial

199. Kyrgyzstan has a tradition of recognizing and rewarding outstanding rangers, including members of herding communities. Many of those participating in the network of community-based conservancies, are involved as rangers and have been trained in camera-trapping and the use of SMART.

200. In Tajikistan, some herders informally assist in monitoring and reporting wildlife sightings or poaching activity.

201. In Turkmenistan, herders are increasingly involved in wildlife protection and reporting of poaching cases in exchange for being supported in human-carnivore conflict prevention solutions.

202. Uzbekistan and Kazakhstan have not yet reported formal community ranger incentive schemes, although both countries recognize the value of public engagement in wildlife protection.

4.8 Explore options to minimize livestock grazing on wildlife migration routes (where possible).

203. In Mongolia, RUAs aim to temporarily restrict or shift grazing away from key wildlife routes, especially during sensitive periods like calving or seasonal migrations. While not legally binding, these agreements are supported through technical assistance, pasture improvement programs, and conservation incentives, and represent a practical approach to balancing herder needs with ecological connectivity.

204. In Pakistan, the integration of wildlife conservation into community-based management plans indirectly contributes to reducing grazing pressure in some wildlife habitats. While there is no formal policy restricting grazing on migration routes, areas under community trophy hunting schemes often receive additional protection and are managed with conservation goals in mind, which can include limiting livestock access in core wildlife zones.

205. Kyrgyzstan has enacted temporary grazing restrictions in snow leopard corridors, particularly in high-altitude pastures used by argali. Community-based conservancies are also striving to prioritize the protection of migratory routes from livestock competition. The Alatoo Bugu conservancy has been able to negotiate a 40 % reduction in livestock grazing numbers in Zhargykchak in exchange for the conservancy working on supporting developing ecotourism opportunities as an alternative income generating opportunity.

206. In Kazakhstan, while research has identified key migratory pathways—especially for the Saiga antelope—there is no evidence that grazing has been formally restricted in these areas. Efforts to minimize conflict between livestock and wildlife have been focused more on mitigation of infrastructure barriers than on active grazing management within migratory corridors.

207. Uzbekistan, Tajikistan, and Turkmenistan have not reported concrete actions specifically targeting grazing minimization along migration routes, although general research and land-use planning efforts are ongoing in some of these countries.

4.9 Encourage livestock owners to insure their livestock against natural disasters and discourage them from killing wildlife in times of heavy livestock losses.

208. *Partially achieved.* Pakistan has taken the most concrete steps under this action. In areas with community-based conservation and trophy hunting programs, livestock insurance schemes and predator-proof corrals have been introduced as part of broader human-wildlife conflict mitigation strategies. While still limited in coverage, these efforts have shown positive outcomes where implemented, especially when coupled with community awareness and benefit-sharing mechanisms.

209. Mongolia has piloted compensation and insurance schemes in select regions where livestock-wildlife conflict is high, particularly involving Snow Leopards, and other carnivores. These mechanisms are often tied to community-based wildlife conservation agreements and may include elements such as emergency support, risk-sharing arrangements, or in-kind support (e.g. replacement livestock). However, such schemes remain largely donor-driven and are not yet institutionalized or widely available to most herding communities.

210. In Kazakhstan, there is no compulsory livestock insurance programme now (previously there was), and there are no state guarantees for such insurance. Voluntary insurance is possible, but insurance organisations are reluctant to do so. On the other hand, in addition to insurance, there is a legally enshrined possibility of reimbursement of losses from livestock deaths to individuals and legal entities at the expense of budgetary and/or extra-budgetary funds (Rules of reimbursement of damage caused to individuals and legal entities as a result of natural emergencies in the field of agriculture, approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan dated 17 May 2024 No. 167). Such reimbursement is possible only for those animals that were not insured.

211. In Uzbekistan, livestock owners can insure their animals against natural disasters (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 830 dated 30 September 2019, the Regulation on the procedure of livestock insurance in households and economic entities engaged in livestock breeding).

4.10 Introduce certification schemes for livestock products originating from sustainably managed rangelands.

212. *Partially achieved*. Mongolia stands out as the only CAMI Range State actively advancing certification efforts tied to sustainable rangeland management. In areas overlapping with key CAMI species habitats—Asiatic Wild Ass, Mongolian Gazelle, and Argali—Mongolia has piloted certification schemes for sustainable cashmere production.

4.11. Support the vaccination of livestock and herder dogs against transmissible diseases to wildlife sharing the same landscape.

213. *Minimally achieved*. In Mongolia, some targeted vaccination campaigns have been conducted, particularly in the context of outbreaks like foot-and-mouth disease, which poses risks to both livestock and wild ungulates such as the Asiatic Wild Ass and Mongolian Gazelle. While these campaigns are typically aimed at protecting livestock health and market access, they also have indirect benefits for wildlife by reducing disease transmission risks. However, such efforts are often emergency-driven and not part of a dedicated, long-term cross-sector strategy that explicitly includes wildlife conservation objectives.

214. Pakistan and Kyrgyzstan have acknowledged issues related to disease and herder dog predation or conflict with the Snow Leopard, but vaccination programs for dogs and livestock to protect wildlife remain limited.

215. In Kazakhstan, Uzbekistan, Tajikistan, and Turkmenistan, there is no reported evidence of vaccination programs designed to mitigate disease risks to wildlife. Veterinary services may conduct routine vaccinations for livestock health and productivity, but the ecological dimension—particularly the impact of livestock diseases on migratory or endangered species—has not been systematically addressed.

4.12 Explore methods to control and reduce numbers of free-ranging herder and feral dogs and their impact on wildlife populations.

216. *Minimally achieved.* Mongolia is among the few Range States that have recognized the ecological impact of feral and free-ranging herder dogs, particularly in open steppe and desert ecosystems. While no national dog control program is currently in place, some pilot efforts by local authorities and conservation NGOs have introduced awareness campaigns on responsible dog ownership, including recommendations to limit dog movements, sterilize aggressive individuals, and prevent dogs from joining wild animal chases. These efforts are still at a small scale and not yet institutionalized.

217. Pakistan has addressed the threat of herder dogs preying on wildlife, particularly in Snow Leopard habitat, through community education programs. As part of broader conflict mitigation strategies, some initiatives promote better dog management, such as tethering or enclosing dogs, and training them to guard herds without disturbing wildlife. However, these efforts are informal and vary in implementation depending on project support and local interest. Dog sterilization and vaccination are occasionally included in animal health campaigns, but are not consistently practiced with wildlife protection as a primary goal.

218. In Kyrgyzstan and Tajikistan, the issue of free-ranging dogs is acknowledged in discussions on livestock-wildlife conflict, particularly in high-altitude areas where dogs can harass or kill wild ungulates. However, no formal dog control programs exist, and enforcement of responsible dog ownership is weak or non-existent. The role of feral dogs in spreading disease and exerting pressure on small, vulnerable wildlife populations is increasingly recognized but not yet systematically addressed.

219. Kazakhstan, Uzbekistan, and Turkmenistan have not reported any concrete actions or programs aimed at managing the population or behaviour of free-ranging herder dogs.

4.13 Implement and promote the use of conflict reduction methods to avoid wildlife-livestock conflicts.

220. *Partially achieved.* In Pakistan, community-based conservation programmes have introduced predator-proof corrals, livestock insurance schemes, and awareness campaigns that help reduce retaliatory killings of carnivores.

221. Mongolia has promoted several conflict mitigation strategies, especially in the South Gobi and Eastern Steppe regions. Measures include community ranger networks, conservation agreements with herder groups, and public education on the ecological role of carnivores such as wolves and snow leopards. In addition, Mongolia has tested and adopted grazing management measures that reduce overlap between livestock and wildlife, especially during migration or calving seasons, thereby reducing direct competition and disturbance.

222. Kyrgyzstan has implemented similar strategies, particularly in Snow Leopard range areas. Community conservation groups and pasture committees have introduced predator-proof corrals, Foxlights, rotational grazing and conflict awareness programs.

223. In Uzbekistan, some informal conflict reduction practices are emerging, such as using public reporting tools to document illegal retaliatory killings and monitor livestock predation. However, structured conflict mitigation mechanisms (such as corrals, deterrents, or compensation schemes) are not widely implemented.

224. Tajikistan and Turkmenistan have reported supporting communities with carnivore mitigation tools. In Tajikistan through the building of predator-proof corrals and in Turkmenistan through the deployment of Foxlights and “disco collars” for livestock.

4.14 Design grazing rangeland management plans based on scientific research and with involvement of local communities outside of protected areas.

225. *Partially achieved.* Mongolia has introduced community-based rangeland management frameworks supported by scientific assessments of pasture productivity, carrying capacity, and climate vulnerability.

226. Uzbekistan has laid a solid legal foundation through its Law on Pastures (2019), which mandates the development of grazing plans based on carrying capacity assessments and includes provisions for local community participation.

227. Kyrgyzstan has established pasture user committees that manage seasonal grazing in alpine zones and rangelands used by Argali and Snow Leopard. However, the degree to which they are informed by scientific research on rangeland condition, wildlife needs, and climate impacts remains inconsistent.

228. Kazakhstan has conducted scientific research on rangeland use and grazing patterns, particularly in relation to Saiga migration corridors and seasonal livestock movement. However, outside protected areas, there is limited evidence that integrated grazing management plans involving local communities have been developed or formalized.

229. Pakistan promotes community-based conservation and grazing management within its trophy hunting areas, which often fall outside protected zones. Scientific inputs into formal grazing plans are still limited. The primary focus remains on coexistence and conflict reduction, rather than detailed rangeland planning.

230. Tajikistan and Turkmenistan have not reported the development of grazing plans based on scientific assessments or community input outside protected areas. While Tajikistan has a national pasture development program (2023–2027), it is not yet clear to what extent it incorporates wildlife conservation priorities or engages local herders in co-management processes.

4.15 Promote community-based pasture management to increase ownership and responsibility for the protection of pastures by local communities.

231. *Partially achieved.* Mongolia, Uzbekistan, and Kyrgyzstan have taken important steps toward community-based pasture management, with Mongolia offering a strong participatory model and Uzbekistan advancing supportive legislation.

Community engagement and sustainable use

5.2 Support local development (education, health, energy etc.), linked to conservation and the needs of the communities.

232. *Partially achieved.* Pakistan provides one of the strongest examples of linking community development with conservation outcomes, particularly through its community-based trophy hunting programmes, where revenue generated from the sustainable use of wildlife is reinvested into local infrastructure, education, health services, and energy solutions. These community benefit-sharing schemes have created strong local support for Snow Leopard and Urial conservation by directly tying conservation success to improvements in living conditions.

233. Mongolia has also linked conservation efforts to community well-being, especially in areas where conservation agreements are in place. These agreements often include small grants, training, and support for livelihood diversification, as well as awareness-building around sustainable pasture management and wildlife protection. While not always focused on core development sectors like health or education, these initiatives contribute to enhancing community resilience and aligning local interests with conservation outcomes.

234. UNEP Vanishing Treasures is one example of a project in Kyrgyzstan linking conservation with community needs.

235. In Uzbekistan, Kazakhstan, Tajikistan, and Turkmenistan, current initiatives are not explicitly linked to creating alternative livelihoods.

5.3 Promote predator proof corrals among communities to avoid killing of livestock by predators.

236. See section 4.13

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.

237. See section 4.13

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.

238. *Partially achieved.* Mongolia has established wildlife clubs in schools and communities, which serve as platforms for environmental education, wildlife monitoring, and awareness-raising. Mongolia also celebrates Saiga Day, a culturally tailored annual event that combines traditional knowledge, local festivities, and conservation messaging to foster pride and stewardship among herding communities. Teachers and youth leaders involved in these efforts often receive certificates, recognition, and training opportunities, creating motivation and sustained participation.

239. Pakistan supports community wildlife clubs and has implemented communication campaigns in areas where community-based trophy hunting programs operate. These initiatives raise awareness of the ecological importance of species like the Snow Leopard and Urial, while reinforcing community benefits tied to conservation. Events such as World Wildlife Day and student competitions are used to engage youth and educators, often accompanied by small rewards, learning materials, or public acknowledgment for outstanding participation.

240. Kyrgyzstan has also promoted culturally relevant conservation activities, such as celebrating Snow Leopard Day and World Wildlife Day in schools and communities. On World Wildlife Day, rangers are celebrated for their outstanding achievements. These events are typically organized with the support of local NGOs and government agencies and are often accompanied by storytelling, art competitions, and presentations by local conservationists. While wildlife clubs exist in some areas, they are still limited in coverage and resources.

241. Kazakhstan and Uzbekistan celebrate Saiga and Snow Leopard Days and organizes awareness campaigns around the two species.

242. Turkmenistan uses World Ranger Day and World Wildlife Day to reward rangers and members of local communities.

5.7 Build functional associations within and between communities along migration routes, under the mandate of national governments, to facilitate communication and cooperation.

243. See section 4.8

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.

244. *Partially achieved.* In Mongolia, community members, including herders, are recruited and trained as community rangers to support anti-poaching patrols, wildlife monitoring, and reporting. These rangers often operate under formal conservation agreements and are recognized by local authorities or project partners, though nationwide official status is still limited. Mongolia also actively promotes citizen science initiatives, such as wildlife observation reporting and the use of the SMART patrol system, enhancing community engagement in data collection and conservation decision-making.

245. Pakistan similarly engages community members in conservation through trophy hunting programmes and community-based management structures. Local wildlife conservation committees and guards are involved in monitoring wildlife, supporting enforcement, and guiding ecotourism efforts. In several areas, these committees have been assigned formal roles through government support, creating a recognized governance structure for community-led conservation.

246. Kyrgyzstan promotes community engagement through community-based conservancies. Conservancy rangers are legally recognized and have the power to apprehend poachers.

247. In Kazakhstan, Tajikistan and Uzbekistan, there are no reported formal mechanisms for engaging local communities as conservation partners or granting official status to community organizations. While some community involvement in reporting or patrolling may occur informally, structured, empowered roles remain undeveloped.

248. In Turkmenistan, a law is under consideration giving powers to local community members to apprehend poachers.

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.

249. *Partially achieved.* Pakistan's community-based trophy hunting programmes are supported by population surveys and quota systems overseen by provincial wildlife departments and the CITES Management Authority. Quotas are based on scientific assessments and reviewed annually to ensure that harvest levels remain sustainable. Importantly, 80% of the revenue is returned to local communities, creating strong incentives for conservation and enforcement. While the approach is considered a model of best practice, ongoing challenges include limited long-term ecological monitoring and ensuring standardization across provinces.

250. Mongolia has conducted population assessments and monitoring programs for key species such as the Mongolian Gazelle, Argali, and Asiatic Wild Ass, including aerial surveys and GPS tracking of wide-ranging species. Although Mongolia has adopted a

moratorium on trophy hunting of Argali, research and monitoring continue to inform wildlife management and guide future policy. A formalized, national-level sustainable use framework that links species monitoring with regulated hunting quotas is still under development.

251. Kazakhstan conducts regular monitoring of Saiga populations, including aerial surveys and GPS collaring, to assess population trends and migration patterns. While Saiga hunting is currently banned due to past overexploitation, this monitoring is essential to inform potential future sustainable use frameworks and to support anti-poaching enforcement. The data also contribute to international conservation planning, given the species' transboundary movements.

252. In Kyrgyzstan and Tajikistan, standardized and science-based monitoring is needed to ensure hunting supports conservation rather than undermines it.

253. Hunting of CAMI species is not allowed in Turkmenistan and Uzbekistan.

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.

254. *Partially achieved.* Mongolia has suspended trophy hunting of Argali since 2020 but continues to explore options for sustainable use through scientific monitoring, policy review, and stakeholder consultations.

255. Kazakhstan, where Saiga Antelope was previously hunted, has maintained a ban on Saiga hunting since the population crash in the early 2000s. However, as populations recover, there is increasing national discussion on potential sustainable use in the future, including meat production or regulated hunting. These discussions are framed around scientific data, ecological thresholds, and potential community benefits, but no formal feasibility study has been conducted yet, and legislative adjustments would be needed for implementation.

256. In Kyrgyzstan and Tajikistan, Argali hunting contributes financially to local development in some cases, but the sustainability and equity of existing programs is not well-assessed. There is a need for systematic evaluation of their ecological impact, economic viability, and legislative coherence to determine whether these practices align with CAMI goals and could be scaled or improved.

257. Uzbekistan and Turkmenistan do not currently implement or promote sustainable use programs for CAMI species.

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.

258. *Partially achieved.* In Pakistan, communities retain 80% of hunting revenues and invest in local development, while also participating in wildlife monitoring and protection. In addition to trophy hunting, ecotourism initiatives (e.g., wildlife viewing, cultural experiences) are being promoted in some regions. The legislative framework supports sustainable use, but there is room for further integration of non-consumptive uses such as nature-based tourism and photography into national and regional conservation strategies.

259. Mongolia has prioritized non-consumptive community-based conservation models, especially in areas where legal hunting has been suspended. Projects promoting

sustainable cashmere, wildlife-friendly tourism, and species celebration days (e.g., Saiga Day) help build conservation incentives without reliance on hunting. Community rangers and conservation agreements provide both income and recognition to local participants. While some regions allow regulated subsistence use (e.g., for traditional purposes), such practices are tightly controlled under Mongolia's wildlife law. Opportunities for expansion include strengthening legal frameworks for nature tourism and improving benefit-sharing mechanisms.

260. Kyrgyzstan and Tajikistan have implemented community-based ecotourism initiatives in high-altitude areas important for Snow Leopard and Argali conservation. In some communities, small-scale tourism enterprises offer wildlife tracking, hiking, and cultural experiences. These are often run by local associations or in partnership with NGOs. However, the legislative framework is stronger for consumptive use (trophy hunting) than for non-consumptive options, which face challenges such as limited infrastructure, weak market access, and inconsistent support from local authorities.

261. Uzbekistan has made efforts to promote eco-cultural tourism in areas like the Ustyurt Plateau, though these are still in the exploratory phase. Currently the country lacks specific policy mechanisms or financial incentives to support community-based tourism or wildlife photography as conservation tools. Public-private partnerships and community-level planning could help expand these options if formally recognized in national development and conservation strategies.

262. Kazakhstan has not yet developed strong community-based wildlife use models. Saiga-related tourism or photography has potential—particularly given international interest—but remains untapped. The legal framework focuses more on protection and enforcement, and sustainable use options beyond research permits are limited. Reviewing laws to allow low-impact community-led tourism in Saiga regions could provide a new incentive for local stewardship.

263. Turkmenistan has some limited promotion of wildlife photography or ecotourism, but currently no clear legislative pathway for community groups to benefit from such activities.

Good Governance of Natural Resource Management

6.2 Mainstream good governance principles into national policy and regulatory frameworks.

264. *Partially achieved*. Pakistan and Mongolia have incorporated community-based conservation and benefit-sharing into legal structures.

265. The Law of the Republic of Kazakhstan 'On Protection, Reproduction and Use of Wildlife' - contains provisions on protection of rare and endangered species, including migratory species; and the Ecological Code of the Republic of Kazakhstan (as amended in 2021) - regulates issues of habitat conservation and ecosystem connectivity.

266. Kyrgyzstan has integrated the IUCN Guidelines for the Sustainable Utilisation of Wildlife; the Methodological Recommendations of the Ministry of Environmental Protection of the Kyrgyz Republic; and the FAO Guidelines for Sustainable Management of Natural Resources in Central Asia.

267. In Uzbekistan, the National Biodiversity Strategy and Action Plan for 2019-2028 (Cabinet of Ministers Resolution No. 484 of 11 June 2019) includes measures to conserve rare and threatened species, including Saiga and Asiatic Wild Ass, and programmes for monitoring, protected areas and sustainable population management. The National

Action Plan for Saiga Conservation in Uzbekistan contains recommendations on monitoring, habitat protection, anti-poaching and scientific research.

6.3 Create a 'best practice' policy guide for governance issues that affect CAMI species and share across the CAMI region.

268. *Not achieved.* While several countries—such as Mongolia, Pakistan, and Kazakhstan—have piloted promising governance approaches these remain country-specific and are not yet compiled or shared in a structured, region-wide format.

6.4 Advocate for better integration of good governance principles benefiting CAMI species in multinational fora.

269. Not achieved. There is no evidence of systematic advocacy for embedding good governance principles—such as transparency, community participation, accountability, and equitable benefit-sharing—into multinational platforms.

6.5 Involve relevant sectors whose operations and policies affect CAMI species in national and international CAMI-related workshops.

270. *Minimally achieved.* Some Range States, notably Uzbekistan, Pakistan, and Mongolia, have made efforts to engage cross-sectoral stakeholders in CAMI-related discussions.

271. Uzbekistan has hosted national workshops on ecological corridors and infrastructure planning, involving environment, transport, and construction sectors. Similarly, Pakistan has engaged multiple ministries, including those responsible for climate change, forests, and wildlife, in dialogues around trophy hunting, protected areas, and wildlife corridors.

272. Mongolia has involved infrastructure developers and environmental agencies in consultations around the wildlife-friendly infrastructure standards, reflecting a growing recognition of the need for cross-sector integration.

273. However, in many countries, participation from key sectors remains limited or *ad hoc,* limiting the effectiveness of CAMI initiatives in influencing broader policy and development planning.

Capacity Development

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.

274. *Partially achieved.* Kyrgyzstan, Kazakhstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan have offered training workshops and field-based learning opportunities—often in partnership with NGOs or international organizations—for young professionals in wildlife monitoring, SMART patrols, and conflict mitigation.

7.2 Train protected area and community-based rangers and managers in wildlife management, human-wildlife conflict, combating illegal hunting and developing participatory conservation.

275. *Partially achieved.* Mongolia has conducted extensive training for both government rangers and community rangers, covering topics such as crime scene investigation, species identification, SMART patrol use, and community engagement. These trainings

are often delivered in partnership with NGOs and international organizations and are focused on areas with high wildlife crime or ecological importance.

276. Pakistan has trained community wildlife rangers and protected area staff, especially in areas under community-based trophy hunting programmes. Training includes anti-poaching techniques, wildlife monitoring, and conflict mitigation (e.g., use of predator-proof corrals), with strong links to participatory conservation and benefit-sharing.

277. Uzbekistan has conducted CITES-focused training for customs and environmental officers, and organized workshops on illegal wildlife trade and species identification, though more emphasis is placed on enforcement than participatory conservation or community engagement.

278. Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan have hosted ranger training workshops, often supported by NGOs or regional collaborations, covering topics such as biodiversity monitoring and protected area patrolling.

7.3 Launch annual / biannual wildlife conservation meetings for CAMI Range States as a continuous forum for wildlife conservation in the region.

279. *Activity not clearly phrased to be evaluated, not clear who is to launch such meetings and for what purpose, for meetings conducted by CMS Secretariat see Secretariat Report (UNEP/CMS/CAMI/Doc.7).*

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).

280. See section 7.2

7.5 Improve the capacity of implementing partners to undertake participatory and technically sound planning and implementation of research, conservation and sustainable use.

281. See section 7.2

Scientific knowledge

8.2 Develop and implement range-wide science-based programmes, addressing population status and trends with regard to distributions, connectivity and demography, ecosystem function and landscape permeability, drivers of change (such as climate and socio-economic factors) and explore future pathways and scenarios.

282. *Partially achieved*. Mongolia has carried out extensive GPS collaring, aerial surveys, and habitat mapping for Asiatic Wild Ass, Mongolian Gazelle, and Argali, examining movement patterns, landscape use, and threats such as infrastructure barriers and climate variability. This research supports national-level planning but is not yet fully integrated into a regional framework.

283. Kazakhstan has focused particularly on the Saiga Antelope, with long-term monitoring programs that track population trends, migration corridors, and disease outbreaks. These efforts are supported by spatial data and contribute to understanding landscape connectivity and the impacts of fencing, roads, and other infrastructure. Transboundary data sharing and coordinated research occurs with Turkmenistan and Uzbekistan for Persian leopard (with Turkmenistan only), Asiatic Wild Ass, Goitered Gazelle and Urial.

284. Mongolia, Pakistan, Kazakhstan Kyrgyzstan, Tajikistan and Uzbekistan are contributing to the snow leopard range wide assessment.

285. Turkmenistan has a country-wide monitoring system for the Persian leopard, Urial and Goitered Gazelle.

8.3 Based on the gap analysis, define and develop appropriate monitoring indicators for species and conservation programs.

286. *Not achieved.* There isn't a regionally agreed set of indicators that reflect population trends, habitat quality, connectivity, or human pressures.

8.4 Support the integration and application of findings gathered from scientific research into conservation management planning, implementation and evaluation.

287. *Partially achieved.* In Mongolia, scientific data from GPS collaring, aerial surveys, and SMART patrols are actively used to inform decisions on wildlife-friendly infrastructure planning, protected area zoning, and community-based rangeland management.

288. Similarly, Kazakhstan has used Saiga, monitoring data to guide policy responses to disease outbreaks and infrastructure development projects, including the design of wildlife crossings.

289. In Kyrgyzstan, Tajikistan, Turkmenistan, Pakistan, and Uzbekistan, while species monitoring and ecological studies are conducted, their findings are yet to be fully translated into actionable conservation strategies.

8.6 Foster collaboration between CAMI scientists, regional universities and research institutions, particularly to support the next generation of scientists.

290. *Partially achieved.* Collaborations and exchanges are often project-based and not part of a coordinated regional effort. There is no structured platform or formal network linking CAMI-focused scientists with regional academic institutions to promote joint research, student mentorship, or training programs.

291. Moreover, support for emerging scientists remains limited across most CAMI Range States. Few countries have dedicated funding schemes, internships, or fellowships for students interested in migratory species conservation. Scientific research relevant to CAMI is often conducted by external experts or NGOs, with limited integration of local universities or young professionals.

Coordination, Data Sharing and Review Processes

29.6 Conduct regular technical, thematic, ecoregional workshops in between COPs, facilitate exchange of scientific information among institutions and where appropriate, establish working groups on thematic issues of the POW

292. *Partially achieved.* A few regional workshops have been held around developing and updating species plans or developing guidelines on linear infrastructure. The 2023 Ashgabat meeting stands out as a significant effort to bring together stakeholders from across the region to discuss linear infrastructure impacts. However, such events are still rare and issue-specific, rather than fulfilling the broader goal of regular, cross-cutting technical and thematic exchanges.

29.9 Ensure national consultation of the POW in the relevant ministries after endorsement at the COP13 for national review and approval.

293. *Minimally achieved.* While Mongolia, Uzbekistan, and Pakistan, have made efforts to align national conservation priorities with elements of the CAMI POW, there is no evidence of a formal, government-led review and approval process of the POW involving all relevant ministries (e.g. environment, agriculture, infrastructure, planning) in most States.

*294. I*n many cases, environment ministries and conservation departments are aware of CAMI commitments, but cross-sectoral consultation and integration into national policy frameworks has not occurred. This lack of formal national-level review limits the ability of CAMI actions to be institutionalized, funded, and implemented through domestic systems.

Outreach and Awareness Raising

30.1 Raise awareness and understanding about the importance of the Central Asian region for migratory mammals for different audiences, using the biannual CAMI newsletter, website and other tailored material.

295. *Partially achieved.* While some communication materials have been developed by partner organizations and individual countries—such as species celebration days, awareness campaigns, and educational content, he CAMI newsletter has not been consistently produced, and the CAMI website has not been regularly updated to serve as a central communication and awareness-raising hub.

296. Most awareness efforts remain project-specific and nationally focused, without a coordinated regional communication strategy.

30.2 Produce a video clip showcasing the importance of CAMI and the need to protect CAMI species and their habitat.

297. *Partially achieved.* While all of CAMI Range States have developed national level visual content or media coverage related to specific species, some of these efforts are not coordinated under the CAMI umbrella and do not communicate the broader goals and transboundary nature of the CAMI initiative.

30.4 Initiate systematic awareness raising in the private sector (e.g. Corporate Social Responsibility funds).

298. Not achieved.

Funding

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.

299. Minimally achieved. While many conservation activities are funded by international donors and NGOs, the contribution of national governments in the form of co-financing, in-kind support, or policy backing remains project-specific and often *ad hoc*. Conversely, there are few examples of donors co-investing in government-initiated conservation programs that are directly aligned with the CAMI POW.

31.3 Include conservation actions for migratory species as outlined in the POW in the existing / updated /elaborated state programmes on nature protection.

300. *Minimally achieved.* Mongolia has incorporated elements of wildlife-friendly infrastructure, community-based conservation, and species-specific monitoring into its national biodiversity and environmental strategies (including "Vision 2050" Long-term Development Policy of Mongolia; Endangered Species Conservation Plan, 2025-2028; National Adaptation Plan to Climate Change Mongolia, 2024-2030; and National Biodiversity Programme (2015–2025) which reflect CAMI priorities, even if not explicitly labeled as such.

301. Uzbekistan's Law on Pastures (2019) and its work on ecological corridors show alignment with the POW's habitat connectivity goals.

302. Pakistan's community-based conservation programmes indirectly support CAMI-listed species through trophy hunting revenue-sharing models and localized conservation action.

303. However, in many countries, national action plans do not yet explicitly reference CAMI or its POW.

31.4 Channel national environmental funds that exist under state bodies and include measures on migratory species and the implementation of the POW.

304. *Minimally achieved.* In Mongolia, the Eternal Mongolia initiative, launched in 2024, is a major climate finance agreement aimed at preserving Mongolia's grasslands and biodiversity. It includes a $71 million transition fund supported by international donors, along with a $127 million commitment from the Mongolian government over 15 years. The initiative seeks to expand the country's National Protected Area network, with the potential to generate additional funding streams that could support conservation activities benefiting CAMI species.

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.

305. Not achieved. While several CAMI Range States (e.g. Mongolia, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan) have ongoing or past GEF-funded national projects related to biodiversity, protected areas, or rangeland management, these projects have not been developed specifically in support of CAMI or as regional, multi-country proposals. There is no indication that CAMI has been used as a unifying framework to guide or coordinate proposals across borders or to align national GEF priorities with CAMI's objectives for migratory species conservation.

31.10 Develop mechanisms for using revenues from sustainable wildlife management for conservation activities (e.g. trophy hunting and others) in cooperation with CITES.

306. Partially achieved. In Pakistan, the community-based trophy hunting programmes align closely with CITES principles and serve as a functional mechanism for linking sustainable use with conservation financing.

307. In Kyrgyzstan and Tajikistan, trophy hunting also occurs but the mechanisms for revenue reinvestment into conservation are less transparent or not consistently applied. There is limited information on whether funds are systematically directed to habitat

protection, monitoring, or anti-poaching activities, and cooperation with CITES authorities in this context is not clearly documented.

31.11 Establish a trust fund for CAMI, including with funding from the private sector.

308. *Not achieved.*

Synergies and Stakeholder Involvement

32.1 Initiate a private sector engagement process to more closely involve the private sector and relevant stakeholders (e.g. relevant companies, development banks) into CAMI, inter alia by attending relevant conferences and inviting them to CAMI meetings.

309. *Not achieved.* While some individual projects across the CAMI range have engaged private sector actors in the context of infrastructure development and environmental standards, these efforts are issue-specific and not formally connected to a broader CAMI engagement strategy.

32.2 Include biodiversity conservation measures into the contracts with mining companies (e.g. to Product Sharing Agreements).

310. *Partially* achieved. Under Mongolia's legal framework, mining companies are required to conduct EIAs prior to commencing operations. These assessments must include biodiversity conservation strategies and mitigation measures. Additionally, the Mongolian government has introduced procedural guidelines for biodiversity offsets linked to the EIA law. These guidelines outline methodologies for calculating compensation for biodiversity impacts and define specific actions required to fulfil offset obligations.

32.4 Requests the Secretariat to explore options together with the CITES Secretariat in establishing CAMI as a Joint CMS-CITES Initiative, similar to the Joint CMS-CITES African Carnivores Initiative (see also 1.2).

311. CMS Range States that submitted the National Report expressed support for a Joint CMS-CITES Initiative and encouraged the CMS Secretariat to pursue discussions with the CITES Secretariat on formalizing such collaboration. This positive reception reflects the recognition that many CAMI species are impacted by trade-related threats, making coordination between CMS and CITES both logical and beneficial.

Species-specific Measures

Argali

9.1 Implement the CMS International Single-Species Action Plan for the Conservation of Argali.

312. *Partially achieved.* Mongolia has fully integrated the CMS International Single-Species Action Plan for the Conservation of Argali into its *National Conservation Programme on Endangered Species (2025–2028)*. Pakistan aligns national conservation efforts with the Action Plan through legal protection, protected areas, and community-based trophy hunting programs. Tajikistan, however, has not integrated the plan into national legislation. No information provided in other national reports.

9.2 Evaluate the implementation and achievements of the Action Plan and identify obstacles towards its implementation.

313. *Achieved.* See also the Overview Report on the implementation of the International Single Species Action Plan for the Conservation of the Argali

9.4 Assess the feasibility of reintroducing Argali in previous parts of its range, in particular in the Dauria Special Protected Area.

314. *Not achieved.*

9.5 Carry out a thorough genetic analysis to clarify the taxonomy of Argali and to understand connectivity between Argali (sub-)populations and assess genetic diversity within populations

315. *Not achieved.*

Asiatic Wild Ass

11.1 Update status and distribution of Asiatic Wild Ass in all countries and develop a cross-boundary conservation vision.

316. *Achieved.* Mongolia has fully integrated the Range-Wide Action Plan (RWAP) for the Asiatic Wild Ass into its national policy through its National Conservation Programme on Endangered Species (2025–2028), demonstrating a strong commitment to aligning national conservation with international priorities.

317. Kazakhstan has made significant strides in reintroducing the species. From 2021 to 2024, it translocated 28 kulans (Asiatic Wild Ass) from Altyn Emel to Central Kazakhstan as part of a reintroduction effort, with continued releases planned for 2025. Additionally, Kazakhstan has assessed suitable reintroduction areas and supported cross-border cooperation, under the Ustyurt Memorandum.

318. Uzbekistan also assessed reintroduction potential and carried out successful reintroductions of kulans into the Saiga Landscape Reserve and the Sudochye-Akpetki State Reserve.

11.2 Develop an International Single Species Action Plan for the Asiatic Wild Ass covering all Range States as well as national action plans.

319. *Partially achieved.* For information on the Action Plan, see Secretariat report (UNEP/CMS/CAMI3/Doc.7) See also the Overview Report on Status and Conservation of the Asiatic Wild Ass across its Range (2023) for information regarding national action plans. Mongolia has integrated the key goals and actions of the Range-Wide Action Plan (RWAP) for the Asiatic Wild Ass into its National Conservation Programme on Endangered Species (2025–2028). Mongolia has integrated the key goals and actions of the Range-Wide Action Plan (RWAP) for the Asiatic Wild Ass into its National Conservation Programme on Endangered Species (2025–2028).

320. In Kazakhstan, while an official national action plan specific to the Asiatic Wild Ass was not reported, substantial steps toward reintroduction and population recovery have been taken.

321. Uzbekistan has similarly undertaken key national measures aligned with the intent of a species action plan, including assessing suitable habitat and executing reintroduction activities in designated reserves. However, like Kazakhstan, no formal national action plan specifically titled under the RWAP was identified.

11.3 Assess the impact of linear infrastructure and its cumulative effects on Asiatic Wild Ass and develop and implement mitigation measures (see also 3.3 and 24.3), including wildlife-friendly infrastructure standards.

322. *Partially achieved.* Mongolia has made substantial advancements in assessing infrastructure impacts and implementing mitigation for the Asiatic Wild Ass. Research has shown that roads, railways, and fences disrupt migration routes and fragment habitats critical to the species. In response, Mongolia has adopted wildlife-friendly infrastructure standards, which are now incorporated into national EIAs.

323. Kazakhstan has similarly begun to address these concerns through the creation of wildlife passages in border fences with Turkmenistan and Uzbekistan. Camera trap data confirmed their usage by species including the Asiatic Wild Ass (Kulan). Additionally, Kazakhstan has conducted landscape-level assessments to evaluate infrastructure impacts, particularly during the reconstruction of major highways, and proposed wildlife crossing designs based on mapped migration routes.

11.4 Review and improve the regulatory framework on combating wildlife crime and linear infrastructure (as 2.1)

324. Partially achieved. Mongolia has taken steps to modernize its wildlife crime enforcement framework. Key legislation, including the Law on Fauna and Criminal Code, has been revised to address wildlife trafficking and illegal hunting, including online and cyber-enabled crimes. Mongolia has also established a multi-agency wildlife crime unit and integrated these efforts into enforcement of infrastructure regulations, particularly those affecting species like the Asiatic Wild Ass.

325. Kazakhstan has similarly revised and enforced wildlife protection laws, supported by institutional training and interagency coordination among customs, police, and environmental authorities. The creation of wildlife passages in border fences is an example of integrating regulatory and conservation objectives.

11.5 Enact measures to increase the population size and range of Asiatic Wild Ass in Kazakhstan and Turkmenistan (Badhyz, Kaplankyr, Meanachacha).

326. Partially achieved. In Kazakhstan, significant measures have been undertaken to expand the range and numbers of the Asiatic Wild Ass (kulans). Between 2021 and 2024, 28 kulans were translocated from the Altyn Emel National Park to Central Kazakhstan as part of a strategic reintroduction initiative under the Altyn Dala project. This program, led by ACBK and supported by international partners such as the Frankfurt Zoological Society and Nuremberg Zoo, has aimed to establish a viable population in historical range areas. Some animals were released directly, while others are acclimatizing for later release in 2025.

327. In Turkmenistan, Asiatic Wild Ass is only found in Kaplankyr to the north and west of Sarygamysh Lake on Sarygamysh part of the Reserve in the “no-man’s-land” beyond the border (4 individuals were camera trapped in 2024 and two more in early 2025); these individuals seem to be continuous with a larger population of an estimated 100-150 kulan on the Uzbek side. Some 10-15 individuals were documented in the Tersakan Valley west of Sunt Hasardag Nature Reserve and 6 in the Gury Howdan Wildlife Sanctuary. None of the isolated remnants are likely to be viable. In Gury Howdan there are 9 individuals, and regular protection has been established there.

11.6 Assess the possibility for reintroductions where needed and where suitable habitat exists, e.g. in Uzbekistan, Turkmenistan and Kazakhstan.

328. *Partially achieved*. Kazakhstan and Uzbekistan have assessed and acted on reintroduction opportunities for the Asiatic Wild Ass. Kazakhstan identified suitable habitat in Central Kazakhstan and began reintroductions in 2017, with ongoing releases through 2025. Uzbekistan assessed habitat and successfully reintroduced kulans into the Saiga Landscape Reserve and Sudochye-Akpetki Reserve.

11.7. Raise awareness for the need of Asiatic Wild Ass to regularly access water points, identify water points of population level importance and guarantee unobstructed access for Asiatic Wild Ass by avoiding infrastructure development, human disturbance (including illegal hunting), and depletion of the water sources for other uses.

329. *Partially achieved.* Mongolia has made progress by identifying key water points in the Gobi region and integrating measures to ensure unobstructed access for Asiatic Wild Ass. This includes protecting critical waterholes from infrastructure development and human disturbance and incorporating these considerations into environmental planning. In Kazakhstan and Uzbekistan, while water access is acknowledged in broader conservation efforts, specific actions to map and protect population-level water sources remain limited or undocumented.

11.8. Promote Asiatic Wild Ass as a flagship species for the conservation and functional connectivity of steppe and desert-steppe ecosystems in Central Asia.

330. *Partially achieved.* Mongolia has taken steps to position the Asiatic Wild Ass as a flagship species by linking its conservation to broader landscape connectivity and desert-steppe ecosystem protection, particularly through national programs and infrastructure planning. Kazakhstan has also highlighted the species in reintroduction and corridor restoration projects.

Asiatic Cheetah

331. No information submitted.

Bukhara Deer

12.2 Support Range States to secure funding for the implementation of the most relevant and urgent measures, outlined in the international Action Plan under the MOU as well as national plans.

332. See the Overview Report on the Conservation Status and Implementation of the Bukhara Deer MoU (2024).

Gobi Bear

15.1 Revise the existing National Action Plan on the Gobi Bear and include a monitoring approach.

333. *Achieved.* Mongolia has revised its National Action Plan for the Gobi Bear, now included in the National Conservation Programme on Endangered Species (2025–2028). The updated plan incorporates a structured monitoring approach to support long-term conservation.

15.2 Organize cooperation between Chinese and Mongolian scientists to implement transboundary collaboration on monitoring and investigation, to mitigate impacts from the international border fence and maintain landscape permeability.

334. *Not achieved.* No cooperation has been reported between Chinese and Mongolian scientists for transboundary monitoring or mitigation of border fence impacts.

15.3 Identify priority areas for transboundary conservation and collaboration between relevant Mongolian and Chinese organizations.

335. Not achieved.

Goitered Gazelle

16.1 Carry out an inventory of current status of the species in all countries of the region in order to update the IUCN Red List and inform regional and national conservation planning.

336. Partially achieved. Only Kazakhstan has conducted drone-based surveys; other countries lack consistent, systematic monitoring. IUCN Red List updates are pending due to insufficient data from most Range States.

16.2 Develop national action plans in all countries for the conservation of Goitered Gazelles and develop a cross-boundary conservation vision.

337. Not achieved.

16.3 Review and improve the regulatory framework on combating wildlife crime and linear infrastructure (see 2.1).

338. Partially achieved. Mongolia, Kazakhstan, and Uzbekistan have taken steps to improve enforcement and legal frameworks against wildlife crime. However, these efforts are not specific to Goitered Gazelles and lack coordination across countries.

16.4 Work with relevant national agencies to gain an understanding of corridors and barriers to connectivity and their impacts on Goitered Gazelles such as border fences and develop mitigation options including for the protection of migration corridors.

339. Partially achieved. Kazakhstan and Mongolia have mapped barriers and migration routes.

16.5 Review and assess the impact of trade and poaching of Goitered Gazelles and its impact on the species.

340. Not achieved.

16.6 Assess the possibility of reintroductions where needed and where suitable habitat exists.

341. Partially achieved. Goitered Gazelle have been brought to Kyrgyzstan from Uzbekistan. They are kept in a captive facility. First release is planned for the summer of 2025.

16.7 Assist in the establishment and/or support of a network of well-managed protected areas covering the range of Goitered Gazelles, including transboundary areas.

342. Partially achieved. Uzbekistan, Kazakhstan and Turkmenistan have signed the Ustyurt MoU.

16.8 Assess provisions of territorial conservation of Goitered Gazelle key habitat and develop recommendations for improvement of conservation measures taking into consideration movement patterns.

343. *Partially achieved. M*ongolia has assessed key habitat in the Southern Gobi and made recommendations based on seasonal movement data, but other countries have not.

16.9 Develop a standardized system for monitoring of Goitered Gazelle populations including distribution, population size, habitat quality and impact of land use and climate change, and other threats.

344. *Not achieved.*

16.10 Conduct field surveys of potential Goitered Gazelle habitat and investigate competitive interactions between gazelles and livestock as well as the risk of gazelle-livestock disease transmission.

345. *Not achieved.*

16.11 Study the needs of communities in Goitered Gazelle habitats, the possibility of using alternative energy sources to prevent the impact on desert vegetation, and the possibility of sustainable livestock production.

346. *Not achieved.*

16.12 Study dispersal and connectivity between populations, e.g. by DNA sampling.

347. *Not achieved.*

16.13 Coordinate conservation of transboundary populations of Goitered Gazelle among Range States, including a platform for communicating and analysing data.

348. *Minimally achieved. S*ome data exchange occurred during the 2024 Ashgabat regional workshop, but no formal coordination platform has been established.

16.14 Promote Goitered Gazelle as a flagship species for wildlife and ecosystem conservation in its current and former habitats.

349. *Not achieved.*

16.15 Raise the knowledge of the broad public and decision makers and promote Goitered Gazelle as symbol of the local, subnational and national identity.

350. *Not achieved.*

16.16 Designate a day in the year as a Goitered Gazelle Day.

351. *Not achieved.*

Kiang

352. *No information submitted.*

Mongolian Gazelle

18.1 Establish a Mongolian Gazelle population monitoring programme covering the whole range of the species including transboundary using standardized survey methods.

353. *Not fully achieved.* While Mongolia conducts population estimates, including winter range surveys, and Russia monitors populations in Zabaykalsky Krai, there is no standardized, coordinated transboundary monitoring program across the full range of the species.

18.2 Identify sites across Mongolian Gazelle range suitable for IUCN category V "Protected Landscape" status or OECMs to maintain their nomadic movements and identify options within the existing policy/legal framework for land protection in Mongolia.

354. *Achieved in Mongolia.* Mongolia has identified and designated over 60,000 km² of protected areas in the Eastern Mongolian Grasslands suitable for IUCN Category V or OECMs to support Mongolian Gazelle mobility and ecosystem health.

18.3 Assess the potential for preserving the steppe for carbon storage and volunteer carbon markets.

355. *Not achieved.*

18.4 Develop a position paper on the effects of intensifying and expanding mechanized hay cutting across the eastern steppes on Mongolian Gazelle and other biodiversity, which includes the following steps:

• Conduct a policy study on the current legal framework for mechanized hay cutting;

• Collect historical records of hay cutting trends;

• Map hay cutting occurrences;

• Develop a stakeholder list, including entities conducting hay cutting;

• Map out the supply chain for hay supplies from Eastern Steppes.

356. *Not achieved.*

18.5 Prepare and disseminate a Mongolian Gazelle and livestock disease policy position paper, which includes the following steps:

• Conduct literature review;

• Establish a working group for sub-regional disease experts;

• Identify current policy on vaccination and response to disease outbreaks;

• Develop recommendations and identify funding for implementation.

357. *Not achieved.*

18.6 Review and assess the impact of hunting on Mongolian Gazelles as well as options for a sustainable use model of the species that provides benefit to local communities and incentives for the conservation of the species.

358. *Not achieved.*

Persian Leopard

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.

359. *Partially achieved.* Priority areas identified in the study Mapping Transboundary Conservation Hotspots for the Central Asian Mammals Initiative

19.3 Test and implement approaches that have had some measure of success in reducing human-leopard conflict (e.g. predator-proof corrals, foxlights, change of husbandry practices, conservation-performances payments, removal of traps, etc).

360. *In progress.* Measures have been tested and deployed (Foxlights; flashing collars, changes in husbandry practices) in Iran, Turkmenistan as well as other parts of the Persian Leopard range.

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.

361. *Not achieved.*

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.

362. *In progress.* Barriers have been identified, and some are being monitored (Kazakhstan-Turkmenistan border fence) and mitigation measures have been tested (wildlife passages) on the Kazakh side.

19.6 Provide technical support and equipment to protected area and community-area rangers to monitor wildlife and combat poaching.

363. *In progress.* Protected areas in Turkmenistan (Kopetdag, Badhyz, Sunt Hasardag) and Balkan Department of Environment and in Kazakhstan (SSNR Ustyurt and Kyzylsai Regional Natural Park) have received training, equipment support. Balkan Deparrtment of Environment uses SMART to improve patrolling.

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.

364. *In progress.* Camera traps in Turkmenistan and Kazakhstan are being deployed according to the methodology developed used in the Caucasus.

19.8 Develop a communication platform for communicating and analyzing data, especially in case of transboundary populations of Leopards.

365. *In progress.* Research teams in Kazakhstan and Turkmenistan use Wild Me Whiskerbook platform to share data and help identify leopards.

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.

366. *In progress*. The Persian Leopard Working Group – an affiliate of the IUCN SSC Cat Specialist Group has been formally set up. The Group has a website and platform for communicating conservation efforts and results across the region.

19.10 Develop school curricula to promote the value and importance of the Persian Leopard, its role in connecting countries in the region.

367. *Partially achieved.* Persian leopard conservation is taught and promoted in extra curriculum programs so far. Kazakhstan has twice organized a competition to name the leopard in Mangistau and depict the leopard and nature of Mangistau through art.

19.11 Designate a day in the year as Persian Leopard Day.

368. *Not achieved.* Currently Persian leopards are celebrated on International Leopard Day on May 3.

Przewalski's Horse

20.1 Establish transboundary cooperation and coordination for the conservation of Przewalski's Horse among Range States.

369. *Not achieved.*

20.2 Explore needed actions to secure migration corridors between reintroduction sites, e.g. from the Great Gobi B Special Protected Area (SPA) to other protected areas in Mongolia.

370. *Not achieved.*

20.3 Foster negotiations with China to conserve and protect the Przewalski's Horse habitat between Great Gobi B SPA in Mongolia and the Kalamaili Nature Reserve in China and to open the border fences between the two countries for wildlife migrations.

371. *Not achieved.*

20.4 Explore other possible reintroduction sites for the Przewalski's Horse in the steppes of Mongolia, China, Russia, Kazakhstan and Uzbekistan.

372. *Partially achieved*. Kazakhstan has recently reintroduced Przewalski's Horses after nearly 200 years, indicating some progress.

20.5 Establish a regular communication platform between Mongolia, China, Russia and other Range States to share expertise about Przewalski's Horse reintroduction.

373. *Not achieved.*

20.6 Develop management plans to avoid hybridization with domestic horses in the regions of reintroduction.

374. *Not achieved.*

20.7 Establish an appropriate national legal environment to avoid hybridization with domestic horses.

375. *Not achieved.*

20.8 Set up effective monitoring systems to control the livestock decease situation (e.g. anthrax) and outbreaks, and control transmission to Przewalski's Horse.

376. *Not achieved.*

20.9 Set up a genetic monitoring system in each introduction project and elaborate plans to exchange horses between populations.

377. *Not achieved.*

Saiga Antelope

21.1 Promote implementation of the Memorandum of Understanding concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope (Saiga spp.) and its Medium-Term International Work Programme.

378. *Achieved.* Please see the Overview Report on Saiga Conservation Status and Saiga MOU Implementation (2025).

Snow Leopard

22.1 Support implementation of the Global Snow Leopard & Ecosystem Protection Programme (GSLEP), the National Snow Leopard & Ecosystem Protection Plans (NSLEP) as well as the landscape management planning guidelines.

379. *Achieved.* Mongolia, Pakistan, Tajikistan, Kazakhstan, Kyrgyzstan, and Uzbekistan support GSLEP and have national-level plans (NSLEPs). Landscape planning is ongoing in Kyrgyzstan and Mongolia through priority GSLEP landscapes.

22.2 Reduce Human-Snow Leopard conflict and prevent retaliatory killing, by supporting holistic approaches on conflict prevention, mitigation and conservation incentives as well as awareness raising.

380. *In progress*. Mongolia, Pakistan, and Kyrgyzstan have adopted conflict mitigation strategies such as predator-proof corrals, insurance schemes, and alternative livelihood programs. Awareness campaigns are also ongoing in these countries.

22.3 Improve means to combat illegal wildlife trade in Snow Leopards, including by improving legislation, intensifying law enforcement, better prosecution, addressing drivers and improving data collection, analysis and information sharing and in compliance and cooperation with CITES.

381. *In progress.* Pakistan, Mongolia, and Tajikistan have improved legislation and enforcement. Data collection and law enforcement are progressing, but consistent prosecution and regional information-sharing are still limited.

22.4 Strengthen transboundary collaboration, by overcoming political, social and communication barriers to facilitate animal movement (and ecosystem connectivity), improved protection, effective law enforcement, coordinated monitoring, and periodic information sharing, e.g. through periodic meetings between neighbouring countries to discuss status and threats and coordinate activities.

382. *In progress.* Collaboration exists in the frame of GSLEP, through regular Steering Committee meetings as well as regional initiatives (eg. UNEP Vanishing Treasures, CAMCA).

22.5 Support the four-country agreement on transboundary conservation of Snow Leopards between Uzbekistan, Tajikistan, Kyrgyzstan and Kazakhstan as a model for other countries.

383. *Achieved.* The agreement has been signed and is in force. Pakistan also supports this as a model for broader regional cooperation.

22.6 Analyze, describe and map range-wide functional connectivity among Snow Leopard populations by enhancing the national and transboundary management (including the existing GSLEP landscapes). Develop functional and effective, science-based and participatory management plans.

384. *Partially achieved.* Mongolia, Pakistan, and Kyrgyzstan have mapped key corridors and habitat connectivity. However, a complete range-wide connectivity map and harmonized management plans are still missing.

22.7 Manage livestock grazing practices to minimize negative impacts on the ecosystem, foster coexistence as well as livestock-free zones by – among others – addressing legal obstacles to implementing policies aimed at managing livestock herds in habitats important for Snow Leopard and its prey.

385. *Partially achieved.* Pakistan, Kyrgyzstan, and Mongolia have some grazing regulations, conflict-prevention infrastructure, and livestock-free areas, mostly in protected areas. Legal and policy obstacles persist outside these areas.

22.8 Improve the capacity of implementing partners to undertake participatory and technically sound planning and implementation of research, conservation and sustainable livelihood initiatives.

386. *In progress.* Capacity-building programs exist in Mongolia, Pakistan, and Kyrgyzstan through NGOs and international partners, but training and implementation remain uneven across the range.

22.9 Prevent and mitigate negative impact of infrastructure and extractive industries across Snow Leopard landscapes in compliance with established safeguard policies, including the targeted allocation of offset payments (compensation).

387. *Partially implemented.* Some awareness and policy guidance exist, but implementation is weak. Mongolia and Pakistan report no mitigation or compensation mechanisms in place.

Urial

24.1 Gather and update data on range areas and populations of Urial for national and the IUCN Red List assessments and regional and national planning.

388. *Partially achieved.* No comprehensive, updated data on Urial range and populations has been reported for IUCN Red List reassessment or regional planning. Existing information is fragmented and largely country-specific, indicating the need for coordinated surveys across Range States.

24.2 Assist Range States in including conservation of Urial in national conservation strategies and action plans.

389. *Minimally achieved.* Pakistan has incorporated Urial conservation into its national biodiversity strategies and community-managed area plans. Other Range States have not explicitly reported such integration.

24.3 Prepare comprehensive species conservation action plans at national level.

390. *Minimally achieved.* Pakistan has localized management plans for Urial in community conservation areas but lacks a comprehensive national action plan. No national plans were reported from other countries.

24.4 Identify priority areas for transboundary conservation and collaboration.

391. *Partially achieved.* See section 1.1

24.5 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 movement corridors.

392. Partially achieved. Kazakhstan has constructed wildlife passages in border fences, facilitating movement for Urial and other species. However, a region-wide assessment of movement corridors and obstacles is lacking.

24.6 Promote landscape level conservation of Urial through the establishment and/or support of a network of well-managed protected and game management areas, including community-managed areas and transboundary areas.

393. In progress. Pakistan supports community-managed conservation areas for Urial, while Uzbekistan, Kazakhstan and Turkmenistan have protected areas. Broader, coordinated networks, especially transboundary ones, are not yet developed.

24.7 Explore options to address habitat loss caused, among others, by infrastructure, urbanization, livestock grazing and other agricultural land-use, through e.g., prevention, mitigation and compensation measures, regulation of grazing, and incentivizing the conservation, rehabilitation and sustainable use of natural rangeland and woodland vegetation.

394. Minimally achieved. Pakistan has implemented grazing regulations and conservation incentives in Urial habitats. Other countries have not reported significant measures to mitigate habitat loss or promote rangeland sustainability for Urial.

24.8 Develop sustainable use models, including community-based regulated hunting and tourism, which incentivize local land users and communities to prevent poaching and to conserve Urial in coexistence with other land uses.

395. Partially achieved. Pakistan runs a successful community-based trophy hunting program, returning 80% of revenue to local communities, which has proven effective in reducing poaching and supporting conservation.

24.9 Develop, test and implement approaches that reduce conflict caused by crop raiding through prevention and compensation of damages (crop selection, scaring off from sensitive crops, benefit sharing from sustainable use).

396. Not achieved.

24.10 Develop systems for monitoring of Urial range areas, population status, habitat suitability and impact of land use and climate change.

397. Not achieved. No structured or standardized monitoring system has been reported. Population trends and land use impacts are poorly documented across the region.

24.11 Study movements and connectivity between populations, e.g. by DNA sampling and the use of satellite telemetry.

398. Not achieved.

24.12 Explore the impact of threats, such as poaching, competition with livestock, land-use, climate change, infrastructure and urbanization.

399. Not achieved.

24.13 Study risks of Urial-livestock disease transmission, elaborate response protocols and undertake mitigation action.

400. Not achieved.

24.14 Support communication and information exchange across the Range States, especially in case of transboundary populations.

401. Minimally achieved. Some cooperation exists between Turkmenistan, Kazakhstan and Uzbekistan in reporting information on urial crossing the border fence.

24.15 Promote Urial as a flagship species for wildlife and ecosystem conservation in its current and former habitats.

402. Not achieved.

24.16 Raise the knowledge of the broad public and decision makers and encourage conservation actions by promoting the Urial and its subspecies as symbol of local, subnational and national identity development.

403. Not achieved.

Wild Camel

25.1 Develop an action plan to include a wildlife monitoring approach for the international transboundary Wild Camel populations in the Gobi.

404. Not achieved.

25.2 Conduct field studies using camera-traps and patrol-based monitoring to assess the migration of the transboundary Wild Camel population in Mongolia and China.

405. Partially achieved. Mongolia has conducted extensive camera trap surveys in the Great Gobi A GGASPA, estimating about 664 individuals. However, these surveys focus primarily within Mongolia, and no coordinated monitoring with China has been reported.

25.3 Organize cooperation between Chinese and Mongolian scientists to implement transboundary collaboration on monitoring and investigation, to mitigate impacts from the international border fence and maintain landscape permeability. This cooperation to be incorporated in a Memorandum of Understanding.

406. Not achieved.

25.4 Focus on wild population dynamics and its response to habitat fragmentation and destruction of migratory routes caused by illegal mining.

407. Partially achieved. Satellite data and research from Mongolia have shown that Wild Camels are altering movement patterns to avoid mining zones. However, there is no systematic study of population dynamics or formal mitigation strategies addressing mining impacts.

Wild Yak

408. No information submitted

Conclusions: successes, challenges and main conservation needs

Successes

409. Several key species have shown strong recovery. The population of Saiga Antelope rebounded in Kazakhstan, Russia and Mongolia. Bukhara Deer is showing promising signs of recovery; and Przewalski's Horse has been reintroduced in Kazakhstan in 2024.

410. Countries have made major strides in cross-border conservation. The Ustyurt Memorandum, signed by Kazakhstan, Turkmenistan, and Uzbekistan, promotes regional ecosystem protection. Joint monitoring for Saiga, Snow Leopard, and Persian Leopard has strengthened collaboration. Shared tools (SMART) and joint ranger trainings highlight effective regional partnerships.

411. Community engagement has driven positive outcomes. In Pakistan, trophy hunting programs return 80% of revenue to local communities, supporting conservation. Mongolia promotes community rangers and sustainable practices like cashmere production through RUAs. Kyrgyzstan's local conservancies play an active role in wildlife monitoring and anti-poaching.

412. Efforts to combat wildlife crime have expanded. SMART patrolling is widely used across multiple countries. Online wildlife trade is being monitored through cybercrime initiatives in Mongolia, Uzbekistan, and Kazakhstan. Uzbekistan launched a Telegram bot for real-time public reporting of wildlife crimes. Kazakhstan has introduced tougher penalties, including mandatory imprisonment, for poaching.

413. Kazakhstan built 32 wildlife crossings at borders used by Saiga, Kulan, and Goitered Gazelles. Mongolia incorporated wildlife-sensitive guidelines into environmental assessments and infrastructure planning. A broader regional dialogue on minimizing infrastructure impacts is ongoing.

414. Collaborative science and monitoring efforts have expanded. This is particularly evident in snow leopard research and monitoring.

415. Turkmenistan joined both CMS and CITES, marking full participation in the conventions by countries in the region.

Challenges

416. Many CAMI Range States still lack comprehensive and consistent data on population sizes, trends, and distribution of CAMI species. Limited resources hinder regular monitoring. Some species and regions remain understudied, affecting the ability to develop evidence-based conservation strategies.

417. While progress has been made in enforcement, some CAMI Range States still have legislation with weak penalties, weak judicial follow-through, and lack of coordination between enforcement agencies. Online wildlife trade is growing and challenging to regulate effectively.

418. On the community-based conservation front, one key challenge is the uneven implementation and limited institutional support across the region. In some countries,

community-based models lack government legal recognition or support, which undermines their ability to play a sustained role in conservation.

419. Although there are emerging efforts to make infrastructure wildlife-friendly, these are not yet widespread or consistently enforced. Wildlife considerations are still rarely integrated at early planning stages of infrastructure projects such as roads, railways, and border fences. Even where technical solutions are known, they are often not implemented due to cost, lack of political will, or insufficient cross-sector coordination. Moreover, there is no consistent application of international standards (such as those of the IFC Performance Standard 6), and collaboration with development banks and private sector actors remains minimal. This results in ongoing fragmentation of habitats and disruption of migratory routes - one of the most serious threats to CAMI species.

420. Another major challenge is the inadequate integration of CAMI priorities into national policies, planning, and cross-sectoral frameworks. While some countries have made efforts to align their biodiversity and land use strategies with CAMI goals, in most cases, migratory species conservation is not systematically embedded in national development or infrastructure policies.

421. Additionally, coordination across ministries, sectors (e.g., transport, agriculture), and borders remains weak, with limited formal mechanisms for collaboration.

422. Moreover, there is a need to expand scientific capacity, standardize monitoring indicators, and better integrate research findings into policy and management to ensure evidence-based decision-making.

Recommendations

423. The recommendations below aim to build on existing successes while addressing identified challenges and ensuring that CAMI continues to function as an effective regional platform for migratory mammal conservation in Central Asia.

To CAMI Range States with the support of the CMS Secretariat:

424. Establish a CAMI Trust Fund: create a dedicated, regionally managed trust fund to provide long-term, sustainable financing for CAMI activities. This should include contributions from governments, donors, and the private sector (e.g. through CSR or biodiversity offsets). See also Report on the Identification of Funding Options for the implementation of the CAMI (2025).

425. Promote Regional and Transboundary Project Development: scale up joint fundraising efforts by developing transboundary or ecoregional project proposals that align with donor priorities (e.g. GEF, GCF). Strengthen partnerships with GEF, implementing agencies like UNDP, ADB, and the World Bank; and

426. Engage the Private Sector strategically: initiate a structured private sector engagement process, inviting companies and financial institutions to CAMI meetings and environmental forums. Encourage corporate support for conservation through sponsorships, offsets, and sustainability investments.

To CAMI Range States with the support of NGOs:

427. Formalize Community-Based Conservation Structures: provide legal recognition and government support.

To CAMI Range States with support from NGOs and scientific institutions:

428. Institutionalize Wildlife-Friendly Infrastructure Planning: make wildlife impact assessments and connectivity planning a standard part of infrastructure development. Promote the adoption of wildlife crossings, fencing modifications, and route alternatives, and align national standards with IFC Performance Standard 6; and

429. Enhance Scientific Collaboration and Monitoring: develop CAMI level standardized indicators for migratory species and habitats. Foster partnerships between regional universities, scientists, and conservationists to support long-term, applied research.

To CAMI Range States:

430. Integrate the updated CAMI Programme of Work into National Policies: ensure that conservation actions for migratory species are formally included in national biodiversity strategies, environmental laws, land-use plans, and infrastructure policies and ensure cross-sectoral consultations on implementing it.

To CAMI Range States with support from CITES and NGOs:

431. Advance CMS–CITES Collaboration: Explore establishing CAMI as a Joint CMS–CITES Initiative, which would strengthen enforcement, monitoring, and policy coordination, especially for species threatened by illegal trade.