2000-2024

THE TRADE IN ASIAN BIG CATS:

An Analysis of Trends, Threats, Measures and Strategies

CATBYTE | GOINSIGHT

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ABOUT US

Go Insight is an independent, data-driven organisation. All analysis and conclusions are based on rigorous, evidence-based methods, using publicly available information and trusted data sources, and remain fully independent of the interests or agendas of contributing organisations.

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The Trade in Asian Big Cats: An analysis of Trends, Threats, Measures and Strategies

This report assesses trade dynamics in tigers *(Panthera tigris),* leopards *(Panthera pardus),* clouded leopards *(Neofelis nebulosa and N. diardi),* snow leopards *(Panthera uncia),* lions *(Panthera leo leo),* and Asiatic cheetahs (Acinonyx jubatus venaticus), collectively referred to as Asian big cats (ABCs).

Drawing on 25 years of data from the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) records and reported illegal trade, the analysis identifies trends, patterns, and persistent threats to ABCs. In preparation for CITES 20th meeting of the Conference of the Parties (CoP20), the report also examines the impact and implementation of CITES measures and guidance, highlighting successful approaches and key opportunities. Specifically, it evaluates the application of Resolution Conf. 12.5 (Rev. CoP19) on the conservation of and trade in tigers and other Appendix-I ABC species, its Decisions on ABCs, the Big Cat Task Force Outcome Document, and prior reviews, focusing on 1. Legislative and Regulatory Frameworks, 2. Law Enforcement, and 3. Demand Reduction and Education initiatives.

GLOBAL TRADE DYNAMICS

Analysis of both regulated (CITES) and illegal trade (seizures and poaching incidents) provides a comprehensive assessment of ABC demand and supply. Between 2000 and 2024, an estimated 6,467 tiger transactions were recorded across 147 countries, with 17 countries, of which eight are range States, accounting for 70% of all trade records. Illegal activity is even more concentrated, with 93% of illegal cases reported in these same countries. Snow leopard trade involved 599 records across 45 countries, clouded leopards 247 records across 28 countries, and leopards 2,009 records across 35 countries. Patterns differ by species: tigers dominate illegal trade in high-value parts (skins, bones), while most live individuals appear in CITES trade. Snow leopard and clouded leopard records are similarly dominated by live animals in CITES trade, but skins, bones, and other parts are primarily reported in illegal markets. For leopards, illegal trade is largely focused on skins, with live animals less commonly reported. Most live ABCs are reported under CITES for zoological purposes, with a substantial proportion bred in captivity. These insights highlight that while CITES trade is geographically broader, illegal trade is tightly focused on a limited number of countries and predominantly involves high-value ABC commodities. Integrating multiple data sources provides a foundation for proactive monitoring of trade dynamics, identifying interconnectedness across species and demand patterns, and supporting targeted conservation action.

ILLEGAL TRADE IN ABC RANGE STATES

Analysis of 3,564 reported incidents of poaching and illegal trade in ABCs between 2000 and 2024 shows a long-term upward trend, with incidents peaking in 2020. More than one quarter of all cases were reported between 2019–2023. While reported incidents have risen, the estimated volume of animals seized has declined during the same period. An estimated minimum count of 8,468 to a maximum count of 10,169 ABCs were found in illegal trade, indicating a shift from fewer large consignments to more frequent, smaller-scale seizures. By volume of individual animals, leopards dominate illegal trade (54% / 4,571), followed by tigers (39% / 3,268), with snow leopards, clouded leopards, lions, and cheetahs comprising a smaller share. Illegal activity across the 33 ABC range States is concentrated in eight countries: India, China, Nepal, Thailand, Indonesia, Viet Nam, Russia, and Malaysia which together account for over 90% (n =) of documented cases and underscoring their central role in the illegal trade of ABCs. India leads in the number of incidents, China's share has declined, and Viet Nam and Thailand have become increasingly prominent over the 25-year period.

Emerging threats to ABCs include the exotic pet trade and live cub trafficking, often facilitated by overlapping criminal networks with strong links to captive breeding. Online platforms are key marketplaces for parts, derivatives, and live ABCs. Tigers feature most prominently, though this likely reflects greater monitoring effort rather than higher trade volume.

TIGER *(Panthera tigris)*

The most recent global tiger population is estimated at 3,726–5,578 individuals, with 2,608–3,905 mature individuals and a best estimate of 3,140. While targeted conservation efforts have led to population increases in some range countries for example, Thailand's wild tiger numbers rising to 179–223 between 2015 and 2021 the species remains classified as Endangered on the IUCN Red List. Populations traditionally identified as Indochinese *(P. t. corbetti)* and Malayan *(P. t. jacksoni)* tigers have experienced steep declines and local extirpations, though recent genetic and taxonomic studies suggest that mainland Southeast Asian tigers may represent a single lineage.

Reporting of illegal tiger trade across Asian range States shows a long-term increase, with 2,096 documented incidents involving a range of between 3,268-4,402 tigers. As wild tigers become increasingly scarce, traffickers exploit substitute species primarily leopards and lions to supply traditional medicine and other products. High-value parts such as skins, bones, and claws remain in demand, with illicit trade frequently linked to transnational criminal networks. Case studies illustrate these dynamics: in 2020, Cambodia saw the confiscation of tiger bones connected to organised crime targeting Chinese tourists; Myanmar shows limited seizure data despite being a key source and transit country; and Viet Nam continues to receive tigers from captive breeding facilities in Thailand and Lao PDR for illegal products. Emerging trade risks in Bangladesh, despite low seizure

numbers, underscore the importance of looking beyond seizures to reveal hidden criminal dynamics.

Online trade, particularly via Facebook, further facilitates cross-border demand. Commercial breeding, though often legal, poses additional risks through surplus animals or products entering illicit markets. Tiger trafficking intersects with broader criminal activity, including financial fraud, human trafficking, and informal networks, as exemplified by a 2021 Nepal case in which tiger products were linked to illegal gambling and financial crimes highlighting that pursuing financial crime investigations can be a critical tool for unravelling complex trafficking networks.

SNOW LEOPARD *(Panthera uncia)*

The snow leopard is one of the most elusive and vulnerable Asian big cats, with current estimates of 2,710–3,386 mature individuals, based on a minimum global population of ~4,000. The species was reclassified from Endangered to Vulnerable in 2017, but overall numbers are projected to decline by at least 10% over the next three generations due to habitat loss, declining prey availability, human–wildlife conflict, feral dogs, climate change, and ongoing illegal trade. While historical estimates suggested that 221–450 snow leopards were poached annually since 2008 representing up to 16% of the population, these figures are now outdated, and a more current assessment of poaching levels is urgently needed.

Between 2000 and 2024, 218 incidents of snow leopard illegal trade were reported, involving 430–467 animals. Over the past 25 years, the number of snow leopard-related incidents and the number of snow leopards found in trade has declined, with reductions in trade recorded across several range States. It is likely that under-reporting and low detection capacity in some range States continue to obscure the true scale of trade. Notably, the most recent period (2017-2024) shows only 23 reported incidents (29 snow leopards) compared with 93 incidents (180 snow leopards) from 2009–2016, highlighting gaps in reporting and the need for broader data sources and additional research methods to understand current threat levels. WWF-Mongolia's 10-year environmental crime analysis (2013–2023) recorded spikes in illegal trade in 2019 and 2020; this likely reflects improved law enforcement cooperation and investigations or growing demand for snow leopard parts as substitutes for scarce tiger and other rare wildlife products, rather than a true surge in poaching.
Most snow leopard commodities in trade are skins, accounting for 62% of incidents during the most recent period (2017-2024). This is against a broader decline in the appearance of skins in the ABC trade during the same period. Trade in snow leopard parts, primarily bones, teeth, and claws, remain significant in Traditional Asian Medicine markets, though smaller in volume than tiger trade. A case study from China illustrates that snow leopards are of interest to organised crime, with networks accessing markets and resources that could threaten populations. Live snow leopard trafficking appears limited, but cases such as a cub captured in Gilgit-Baltistan in 2024 demonstrate ongoing risk. China has historically seized most snow leopard products (65%, n = 197), with remaining cases distributed across six range States. Overall, the limited reporting, potential under-detection, and the adaptability of criminal networks underscore the need for updated poaching assessments, enhanced monitoring, and targeted enforcement to safeguard snow leopard populations.

CLOUDED LEOPARD *(Neofelis nebulosa & Neofelis diardi)*

Previously considered a single species, clouded leopards are now recognised as two distinct species: the mainland clouded leopard *(Neofelis nebulosa)* and the Sunda clouded leopard *(Neofelis diardi)*. Current estimates suggest total populations below 10,000 individuals: approximately 3,900–5,580 mainland clouded leopards and around 4,500 Sunda clouded leopards. The Sunda clouded leopard is confined to Sumatra and Borneo. Both species are listed by the IUCN as Vulnerable.

Between 2000 and 2024, 106 clouded leopard-related incidents were recorded, with an estimated 158–178 individuals represented in illegal trade. A sharp increase in 2014 is largely attributed to a single seizure of 19 skins in Cambodia. Temporal analysis across three periods suggests a shift in trade dynamics. During the most recent period (2017–2024), Thailand, India, and Indonesia have become more prominent, while activity in Cambodia and China has declined. Nepal and Viet Nam show steady but persistent levels of illegal trade throughout the period under review.

Across the dataset, skins account for most seized commodities. However, since 2015, seizures have increasingly included teeth, bones, and claws, possibly reflecting both diversification in trade products and improved reporting practices.

A review of available cases shows that clouded leopards are frequently trafficked alongside other high-value species such as tigers, leopards, and pangolins. This pattern suggests that their trade is typically embedded within broader, multi-species trafficking networks rather than targeted in isolation. This is particularly evident in Thailand and Viet Nam, where trade volumes pose a more significant threat. Such context underscores the networked nature of wildlife crime but also complicates efforts to assess the specific impact of clouded leopard exploitation. Moreover, it may result in more iconic species receiving greater attention and resources. This challenge is even more

pronounced for the Sunda clouded leopard. There remains a paucity of data on the species across both legal and illegal trade over the past 25 years. While dedicated studies have generated improved insights, they are likely to represent only a partial picture.

LEOPARD *(Panthera pardus)*

Leopards historically had a wide distribution across Africa and Asia. In recent years, Asian populations have declined and become increasingly fragmented, with localised extinctions reported throughout their range. While leopards as a species are classified as Vulnerable by the IUCN, several Asian subspecies face much higher risks. Three are listed as Critically Endangered: The Amur leopard *(P. p. orientalis)*: ~130 individuals in the Russian Federation, and 174–348 in North China, the Indochinese leopard *(P. p. delacouri)*: 77–766 mature individuals, and the Arabian leopard *(P. p. nimr)*: 70–84 individuals. Two additional subspecies are considered Endangered: the Javan leopard *(P. p. melas)*: ~319 mature individuals and the Caucasian leopard *(P. p. tulliana)*: 750–1,044 individuals. The Sri Lankan leopard *(P. p. kotiya)* is Vulnerable, and the Indian leopard *(P. p. fusca)* is Near Threatened, with current populations estimated at over 15,000 individuals, although trend data remain limited.

Over the past 25 years, 1,406 leopard-related poaching and seizure incidents were documented. Despite a declining trend in the number of individual leopards represented in trade (4,571–5,075), this pattern is partly skewed by a major 2000 seizure of 18,000 leopard claws. The highest number of illegal trade incidents was recorded in 2020, rising 29% compared to 2019 (n = 35), particularly in ABC range States such as India, Nepal, and Sri Lanka. In Sri Lanka, incidents increased notably after 2017 (n = 20) and in 2020, with several carcasses found with body parts removed. Prior to 2017, only three incidents had been reported in the country. In contrast, China has seen a marked decline, from accounting for 26% of seized leopards between 2000-2008 (n = 705) to just 3% between 2017-2024 (n = 32).

Trade patterns indicate a shift in the type of leopard commodities seized. The volume of skins has declined since 2016, while claws, bones, and live individuals have become increasingly prominent over the past decade. In some countries, such as Myanmar - which functions as a key transit corridor for wildlife trade from South Asia - the extent of leopard-related crime is likely higher than available data suggest. Weak regulatory oversight, limited resources, and the lower profile of leopards may mean that trade is not detected, making it difficult to assess the true scope of the threat.

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Leopards often receive lower enforcement and policy prioritisation compared with more iconic species such as tigers. This "charisma gap" can mask the true scale of illegal activity, as seizures and monitoring efforts disproportionately target tigers, leaving leopard crimes under-detected or under-reported. Misidentification and the laundering of leopard parts as tiger products may further obscure the true volume of leopard trafficking. Analysis collated in CatByte shows that convergence between the leopard and tiger trades is the most frequent among all big cats, particularly for skins, followed by claws and bones. This overlap poses challenges to law enforcement, as leopard claws, teeth, and bones may be deliberately passed off as tiger parts or misidentified due to limited forensic testing capacity.

Leopard trafficking overlaps with other illicit trades, including drugs, and often involves cross-border movement. Enforcement operations across Asia illustrate how traffickers exploit shared smuggling routes and networks, with seizures sometimes involving both wildlife products and narcotics. These patterns highlight the complexity of leopard trafficking, its transnational dimension, and the challenges authorities face in detecting and prosecuting such multi-faceted criminal activity.

LION *(Panthera leo leo)*

The Asian lion, long regarded as a distinct subspecies, is now subsumed under *P. l. leo* by the IUCN SSC Cat Specialist Group alongside North African populations. It survives as a single, isolated population in and around Gir Forest National Park, western India. Populations increased from 284 individuals in 1990 to 891 in 2025, primarily due to enhanced habitat protection and reduced poaching. The species remains classified as Endangered due to its restricted range and vulnerability.

Between 2000 and 2024, 18 Illegal trade incidents involving the Asian population of lions were reported, mostly in India (17), representing an estimated minimum of 37 individuals. Most incidents occurred during 2017–2024 and involved smaller body parts such as claws and teeth, although the low number of incidents make it difficult to identify clear patterns. A notable legal case in 2024 saw 20 individuals convicted for poaching lions in Gir National Park, highlighting ongoing threats.

South Africa's captive lion industry has attracted scrutiny for intentional killing of lions for body parts, raising both welfare and trade concerns. Captive lions in Thailand have also entered complex trade networks. While primarily African in origin, these lions supply consumer markets in Asia, where products are often substituted for tiger derivatives, sustaining or expanding demand for big cat products.

Research in China and Viet Nam indicates lion bone wine comprises 18% of consumer preference, with tiger bone wine still dominant (82%). Younger consumers in China showed a greater preference for lion products than older generations. These findings suggest substitution patterns could shift demand increasingly toward lions, posing additional risk to the geographically restricted Asiatic population.

CHEETAH *(Acinonyx jubatus venaticus)*

Once ranging across southwest and central Asia to India, the Asiatic cheetah has disappeared from nearly all of its historic range and now survives only in Iran, mainly within the Touran Biosphere Reserve. This critically endangered subspecies represents the last remaining cheetah population in Asia, estimated at 30–40 individuals.

Although Iran's Asiatic cheetah population has not been confirmed as a direct target of international trafficking, illegal trade continues to pose an indirect threat, particularly through the movement of African cheetahs. Assessing illegal trade specifically involving Asiatic cheetahs is challenging due to the risk of including African individuals, which could distort analyses. Using only incidents where the cheetah is explicitly identified as Asian, three seizures were documented in Iran, all involving cubs, with the most recent incident reported in 2021.

Asian big cat crime is adaptive, transnational, and often embedded within multi-species trafficking networks. Cross-border movement and convergence with other illicit trades highlight the need for integrated enforcement, continuous monitoring, and targeted demand-reduction strategies. Expanding focus beyond tigers and other priority species to include clouded leopards, leopards, and other big cats is essential to fully understand and address illegal trade threats.

LEGAL AND REGULATORY MEASURES

Effective CITES implementation begins with comprehensive national legal frameworks. As of May 2025, only 17 of the 33 ABC range States considered in this report have been granted Category 1 status in the CITES legislation review. Following the various measures, recommendations, and guidelines advanced by CITES, the United Nations Office on Drugs and Crime (UNODC), and observer non-governmental organisations (NGOs), most range States have implemented legislation recognising illegal wildlife trade as a serious offence. Tigers, in particular, are often subject to the highest levels of wildlife protection provided by legal frameworks. However, loopholes and regulatory gaps undermine the effectiveness of these measures. These inconsistencies are often exploited by traders, captive breeding facilities, and transnational organised crime (TOC).

Deterrent penalties are essential to disrupt the illegal trade in ABCs. While some jurisdictions impose strict custodial sentences and high fines, others rely on low administrative penalties, which TOC can absorb as operating costs. Several Parties have aligned penalties with the United Nations Convention against Transnational Organized Crime's (UNTOC) definition of "serious crime", but in some contexts average sentences remain disproportionately low. In recent years, several Parties have reported revisions to their wildlife legislation, increasing both custodial and monetary sentences (e.g., Indonesia, Malaysia, Thailand, China, Viet Nam, United States, and the EU). Complementing wildlife laws with asset forfeiture powers and anti-money laundering (AML) provisions has proven effective in targeting illicit profits. However, the use of asset forfeiture powers and AML frameworks remains inconsistent and limited in ABC cases.

Closing domestic markets also requires legal frameworks to include and define all offences related to the illegal trade of ABCs. Even Parties with relatively comprehensive approaches do not consider all acts involved in this trade. Possession-related offences remain a concern, prompting calls to amend Resolution Conf. 8.4 to, among other things, direct the Secretariat to identify Parties who do not penalise possession of CITES-listed species. Exemptions allowing for the trade of specific big cats may enable substitution and mislabelling, issues that have been documented in previous years. As online platforms increasingly facilitate ABC trade, legislation should also explicitly cover all forms of online advertising and commercial activity related to these species.

The captive keeping and breeding of big cats continues to present major regulatory challenges. Although trade in captive-bred Appendix I specimens is permitted under strict conditions, variations in oversight have created loopholes that can mask illegal activities. In East and Southeast Asia, an estimated 8,900 tigers were held in more than 300 facilities in 2023. Key Parties (e.g., Thailand, Viet Nam, Lao PDR, and China) continue to report progress in strengthening regulatory measures for the management and control

of these facilities, yet notable challenges remain. Gaps persist in areas such as licensing, inspections, record-keeping, and establishing centralised databases. Similar concerns are observed in non-range States (e.g., South Africa), where inconsistent rules on hybrids and non-native species enable the laundering of protected species.

Recommendations (Implementation):

- **Impose deterrent penalties:** Attach deterrent custodial and financial sentences to ABC-related offences, including by aligning wildlife crime offences with the UNTOC definition of serious crimes and by enabling the use of AML legislation and asset forfeiture powers in investigating and prosecuting wildlife crime offences.
- **Comprehensively address all ABC trade-related acts:** Adopt legal frameworks that recognise all trade-related acts as punishable offences, provide a clear definition for such acts, and place the burden of proof on those found in possession of illegal ABC specimens.
- **Advance and strengthen provisions on online trade:** Regulate online trade acts, the advertisement and trade through online social media and e-commerce platforms, including by establishing obligations for digital service providers.
- **Protect non-native and hybrid ABCs:** Adopt comprehensive frameworks that provide the same level of protection to all ABC species, ensuring that non-native species and hybrids are subject to the same levels of protection as native species.
- **Address facilities breeding big cats in captivity:** Adopt the recommendations detailed in the BCTF Outcome Document (2) on the protocols to regulate the breeding of big cats in captivity and to prevent any illegal activities that could be associated with such facilities, including by providing specifications on how such regulations will be implemented and monitored.
- **Enhance reporting:** Maintain consistent reporting to CITES on potential legislation revisions and regulatory advancements and their observed efficacy.

LAW ENFORCEMENT

The effective application of ABC-related legislation depends on empowered, well-resourced, and coordinated enforcement agencies. This requires authorities capable of employing specialised enforcement approaches as outlined in international crime conventions such as the UNTOC and the United Nations Convention against Corruption (UNCAC), namely intelligence-led enforcement, inter-agency coordination, international cooperation and intelligence exchange, and financial investigations. With substantial evidence suggesting an involvement of TOC networks in ABC trafficking, the need for these advanced enforcement methods is of critical importance. Such approaches are essential to address the transnational, organised, and covert nature of these crimes and to ensure resources are directed where they are needed where they will have the greatest impact. However, several key Parties continue to face persistent enforcement challenges, including limited resources, insufficient training, and difficulties in specimen identification, which undermine effective responses across range and non-range States.

Innovative enforcement methods referenced in Res. Conf. 12.5, such as AML approaches, forensic analytical techniques, and intelligence-led enforcement, remain underutilised in addressing ABC-related crime, despite their established use in other serious crimes. Fundamental enforcement limitations persist, particularly in detecting organised criminal activity and conducting proactive, intelligence-led investigations. On the other hand, progress has been reported in forensic analysis, with several Parties developing species-recognition methodologies and registration systems (e.g., Thailand, Czech Republic, and the United States). The persistent challenge of online trade also calls for increased collaboration with digital platforms. While few Parties have reported such engagement to CITES, evidence suggests some have initiated cooperation with online service providers (e.g., in China). Increased reporting on these activities is essential to inform global counter-wildlife crime efforts.

Cross-border and inter-agency collaboration remains crucial given the adaptability of TOC networks and the risk of crime displacement. Regional cooperation frameworks exist in key regions such as Southeast and South Asia. Some Parties (e.g., Viet Nam, Thailand, Lao PDR, and Malaysia) have signed MoUs and held dialogues, while other Parties (e.g., India, Bangladesh, Bhutan, and Nepal) have initiated transboundary engagement to combat TOC involved in trafficking of ABCs. The South Asia Wildlife Enforcement Network has also engaged officials from its member states to enhance capacity and cooperation on wildlife crime. At the international level, operations like INTERPOL's Operation Thunder demonstrate the impact of coordinated enforcement. Nationally, several Parties (Malaysia, Viet Nam, China) have recently strengthened inter-agency coordination mechanisms.

Corruption and illicit financial flows remain major enablers of illegal trade. Southeast Asia's Golden Triangle Special Economic Zones hosts casinos and captive facilities linked to TOC groups involved in various illicit activities. Despite sanctions by several Parties (e.g., United States, United Kingdom, and

Canada) targeting such networks, facilities trading and breeding ABCs continue to operate and expand, underscoring the need for stronger regional enforcement. Encouragingly, some progress has been made in applying financial investigations and AML provisions. In recent years, at least two Parties (e.g., India, Thailand) have used AML legislation to investigate links between tiger trafficking and other serious crimes, occasionally resulting in the forfeiture of key assets. Other Parties (e.g., South Africa, Malaysia) have recently established mechanisms to use these tools, though their reported application in ABC cases remains limited.

Recommendations (Implementation):

- **Strengthened enforcement capacity and coordination:** Empower law enforcement agencies through comprehensive legal mandates, sustained funding, training, and inter-agency coordination, ensuring they have specialised enforcement capabilities in line with the UNTOC and UNCAC
- **Adopt intelligence-led approaches:** Advance the use of intelligence-driven enforcement to generate actionable data, identify trafficking hotspots, and guide proactive interventions
- **Enhance forensic and species identification capabilities:** Expand and adopt forensic and tools and other forms of knowledge on species identification, including through (continued) cooperation with international partners.
- **Enhance monitoring and detection:** Prioritise stricter market monitoring and field investigations, particularly in areas where international seizures and non-seizure indicators suggest ongoing criminal activity.
- **Integrate financial investigations:** Advance financial investigations and AML prosecutions in cases related to the trafficking of ABCs (when applicable, and particularly in known hotspots of TOC).
- **Translate cooperation frameworks into enforcement outcomes:** Convert bilateral and regional cooperation frameworks into measurable enforcement outcomes, including by sharing relevant intelligence and conducting joint investigations. When appropriate and when not interfering with ongoing investigations and prosecutions, encourage the reporting on relevant operational outcomes to CITES.
- **Explore alternative sources of funding:** Reinforce commitments to protect ABCs through sustained funding and potential investments in capacity building and other forms of aid to protect ABCs, seeking to close current funding gaps.

DEMAND REDUCTION

Initiatives aiming to reduce demand provide critical long-term solutions. Several Parties have reported implementing awareness and Social Behaviour Change initiatives. Both targeted and mass awareness campaigns have been observed to show promising results. However, various types of demand persist, and in some cases may even be increasing, underscoring the need to explore opportunities to scale up and adapt messages and strategies to more effectively reach intended audiences. Limited public information on the monitoring and evaluation of past projects continues to limit opportunities to learn from previous challenges and successes. Future projects should aim to strengthen the involvement of specialists, which there has been little reporting on, as well as relevant industries and communities, and government leadership. In addition, initiatives should also seek to understand and address underlying conditions and contexts that allow demand to thrive.

Targeted awareness and education campaigns have engaged with faith leaders (e.g., in Nepal, Thailand) and academic institutions (e.g., Viet Nam, China). To ensure proper targeting, some campaigns (e.g., in Thailand) have been informed by consumer research and demographic profiling. Others (e.g., led by China, USAID) have incorporated training on behaviour change techniques to support continuity and long-term impact. As a result, several of these initiatives have reached millions and influenced consumer intent, particularly around social norms and cultural practices. However, long-term effectiveness depends on sustained engagement and reinforcement across key groups.

Engagement with relevant communities and industries have shown promise by aligning sustainable alternatives with traditions and values Community involvement has proven critical in adapting traditional practices to reduce their impact on big cats (e.g., Nepal). Furthermore, industry engagement with shipping and courier services (e.g., in China), online sellers, and traditional medicine practitioners (e.g., in Viet Nam) has also supported awareness of existing bans and discouraged the use of tiger products. Addressing underlying drivers of demand in source and consumer countries remains fundamental to achieving lasting results. In source countries, factors such as livelihood insecurity, human–wildlife conflict, and economic shocks (e.g., COVID-19) continue to undermine coexistence between local communities and wildlife. Nonetheless, positive developments can be seen where initiatives to addressing these issues, particularly when co-designed and co-managed

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with local communities, have produced encouraging outcomes (e.g., India). In consumer countries, demand continues to stem from traditional medicine (e.g., China, Viet Nam) and luxury markets, where wealth-driven consumption of big cat products has intensified in recent years. Fragmented monitoring and reporting make it difficult to design tailored interventions that address the full range of root causes.

Recommendations (Implementation):

- **Ensure consistent messaging:** Governments and industries should send consistent and unified messages that prohibit and reject the use of ABC parts and product. This would strengthen their impact on social norms and widen the reach of campaigns.
- **Support bans with communication and enforcement:** Pair bans with consistent, harmonised messaging and robust enforcement to prevent unintended effects, such as increased desirability due to rarity.
- **Address underlying drivers:** Adopt a holistic demand-reduction approach that seeks to understand consumer drivers and behaviour while seeking to address the socioeconomic conditions in source countries. For instance, by investing in sustainable livelihoods, economic resilience, and community engagement to reduce dependency on (illegal) wildlife trade.
- **Strengthen Monitoring and Evaluation (M&E):** Ensure M&E mechanisms are comprehensive enough to measure the real-world impact of demand reduction initiatives, and promote transparent reporting to support replication of effective campaigns.
- **Engage experts and specialists:** Deepen collaboration with behavioural scientists, communication experts, and social marketing specialists to design better-targeted interventions.
- Enhance data collection and analysis: Ensure that the design of future initiatives consider lessons learned from previous campaigns by adopting a robust data collection and analysis methodology.

Recommendations (Strengthening CITES measures):

This report provides a comprehensive understanding of the dynamics of the illegal trade in ABCs. In doing so, it draws attention to the abundance of information available on the trade of ABCs, and how this information can be used to build evidence-based strategies. To maximise the value of ABC trade data, Party reporting should be complemented with independent analysis drawing on drivers and verified data sources, including those from civil society, academia, intergovernmental organisations, and open-source research. Establishing an independent reporting mechanism that draws from multiple streams and is based on robust analytical methodologies could enhance the reliability of insights available to the Convention, enabling a more systematic identification of trends, gaps, and priority actions. Together, these measures would strengthen the Convention's ability to respond proactively to the evolving dynamics of ABC trade. Additionally, the Conference of the Parties may wish to consider the following:

Resolution Conf. 12.5 (Rev.CoP19):

- Provide a definition for "deterrent penalties", particularly those applicable to high-level offenders.
- Invite Parties to adopt the recommendations regarding wildlife crime linked to the internet in CoP20 Doc. 38.
- Consider separating and expanding guidance on AML measures, forensic techniques, intelligence-led enforcement, and cooperation with internet platforms and the transport sector.

Resolution Conf 11.3 (Rev. CoP19):

- Given the scale and evolution of online trade, consider the development of a dedicated resolution focused specifically on the trade and advertising of illegal wildlife through online platforms.

Resolution 9.6 (Rev. CoP19):

- Encourage all Parties, especially range States, consumer countries, and trade hotspots - to apply a consistent interpretation of "readily recognisable parts or derivatives".

[1] Includes CITES trade data (including Source Code I, and incidents of poaching and seizures

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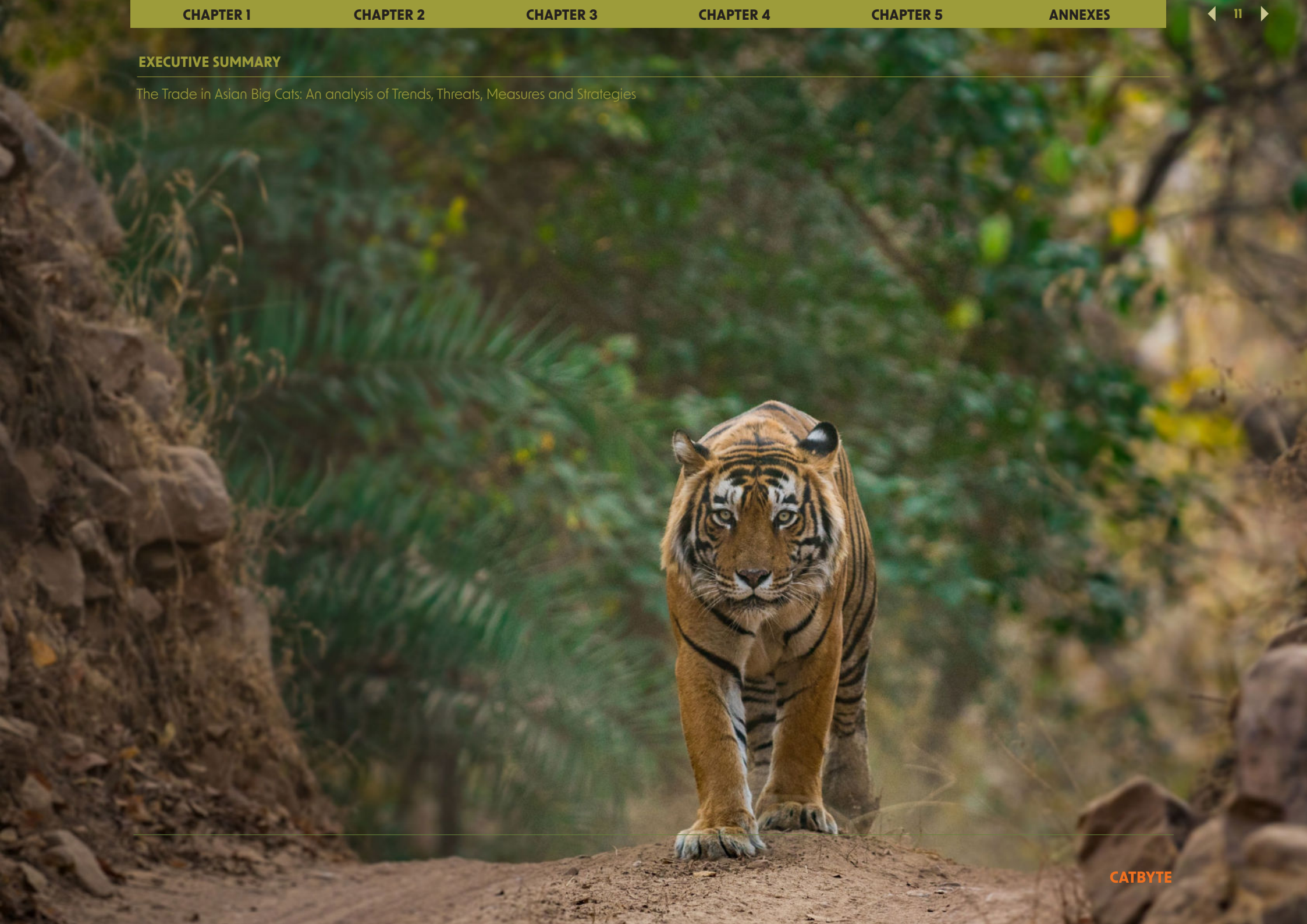


FREQUENTLY USED ABBREVIATIONS

ABBREVIATION	FULL NAME
ABC	Asian big cats
AML	Anti-money laundering
BCPSA	Big Cat Public Safety Act
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
COP	Conference of the Parties
HWC	Human-wildlife conflict
ICCWC	International Consortium on Combatting Wildlife Crime
IUCN	International Union for Conservation of Nature
IWT	Illegal wildlife trade
SBC	Social and behaviour change
SC	Standing Committee
SEZ	Special economic zones
TCO	Transnational criminal organization
TOC	Transnational organized crime
TRC	Tiger range country
UNCAC	United Nations Convention against Corruption
UNODC	United Nations Office on Drugs and Crime
UNTOC	United Nations Convention against Transnational Organized Crime
USAID	United States Agency for International Development
WCCB	Wildlife Crime Control Bureau

INTRODUCTION AND PURPOSE

This report presents an analysis of 25 years of Asian big cat (ABC) trade data, covering both Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) trade data and documented illegal trade, to identify key trends, and persistent threats. The analysis also considers the role of CITES measures, Resolutions, and Decisions, in shaping trade dynamics and conservation outcomes.

All species of ABCs are listed on Appendix I of CITES, generally prohibiting the international commercial trade in these specimens. While cross-cutting Resolutions are also relevant to ABCs, dedicated Resolutions and Decisions advance specific measures to strive for a consistent and uniform response to the trade of ABCs. The most prominent measures remaining in effect to date are found in:

Resolution Conf. 12.5 (Rev. CoP19) on the Conservation of and trade in tigers and other Appendix-I Asian big cat species and

Decisions 14.69, 19.109, 18.100, 18.101, 18.102 (Rev. CoP19), 18.103 (Rev. CoP19), 18.105, 18.106 & 18.107 (Rev. CoP19) to 18.109 (Rev. CoP19)

As mandated by Decisions 19.2 and 19.3, the CITES Big Cat Task Force (BCTF) was convened in April 2023 to identify strategies, measures, and activities to improve international collaboration to address the illegal trade in big cats, which have been detailed in a **'BCTF Outcome Document'.** At the 78th meeting of the Standing Committee (SC78), Parties were encouraged to fully implement measures on this document (see SC78 Doc. 42 and Doc. 43.1). Despite not being mandatory, the Outcome Document provides guidance for the implementation of big cat trade related measures and will therefore be considered in this report.

A number of independent reviews commissioned by CITES have sought to assess progress on the implementation of CITES measures on ABCs. Some notable examples include:

- Review of implementation of Resolution Conf. 12.5 (Rev. CoP16) on Conservation of and trade in tigers and other Appendix-I Asian Big Cat species (2014, **SC65 Doc. 38 Annex 1)**
- Implementation of CITES Decision 17.228: Review of Implementation of Resolution Conf. 12.5 (Rev. CoP17) on Conservation of an Trade in Tigers and other Appendix I Asian Big Cats (initially published in 2018 in **SC70 Doc. 51 Annex 3**; and again in 2019 in **CoP18 Doc. 71.1 Annex 4**)
- The Legal and Illegal Trade in Big Cats: A study in support of Decision 18.246 (2022, **SC75 Doc. 13 Annex 2**)

This report builds on these reviews by providing an updated assessment of trade in ABCs. Chapter 1 provides analysis on trends, patterns, and dynamics in ABC trade since 2000. Chapters 2-4 examine progress reported on the implementation of relevant CITES measures since the last review for the 18th meeting of the Conference of the Parties (CoP18) in 2019 and offer recommendations to strengthen future responses. While relevant topics and circumstantial factors falling outside of this period may be discussed, examples will attempt to reflect the most recent reporting by CITES Parties, governing bodies, and observers.

This report evaluates the availability and quality of data to support trade assessments and reporting mechanisms, highlighting where information enables effective decision-making (at the global, regional and national level) and where gaps remain. Case studies are included to ground the findings in real-world examples of challenges, successes, and areas of good practice.

AIM AND OBJECTIVES

The aim of the report is to identify where progress has been made, where opportunities remain underutilised, and how these developments relate to broader trade dynamics. In doing so, it seeks to inform discussions ahead of CoP20 (24 November - 5 December 2025, Samarkand, Uzbekistan) by demonstrating the value of robust data and independent reporting in guiding conservation decisions. As such, the objectives of this report are to:

- **Assess** the threat posed by illegal trade to ABC species in relation to their conservation status.
- **Analyse** trade patterns and illegal trade data from 2000–2024, with focus on persistent threats and emerging trends.
- **Evaluate** the effectiveness and implementation of CITES measures, including:
    a. Legislative and regulatory frameworks;
    b. Law enforcement strategies;
    c. Demand reduction and education campaigns.
- **Highlight** effective or proven approaches in addressing ABC trade through policy, enforcement, and awareness campaigns.
- **Demonstrate** the value of available data for Parties in making informed decisions at CoP20.
- **Support** adoption of changes to Resolution Conf. 12.5 to strengthen independent reporting.

CHAPTER 1: CONSERVATION STATUS AND TRADE DYNAMICS IN ASIAN BIG CATS

METHODOLOGY

Chapter 1: Conservation Status and Trade Dynamics in Asian Big Cats

The report assesses trade dynamics in tiger *Panthera tigris*, leopard *Panthera pardus*, clouded leopard *Neofelis nebulosa*, *N. diardi*, snow leopard *Panthera uncia*, Lion *Panthera leo leo* and cheetah *Acinonyx jubatus* and employs a combination of qualitative and quantitative research methods, including:

- **Trade Records:** Analysis of CITES trade records, seizures, and poaching incident data captured in CatByte.
- **Contextual Data:** Concerning trade dynamics, methods, drivers and enablers collected by NGOs and field experts.
- **Literature Review:** A comprehensive review of peer-reviewed published papers and government reports to assess conservation status and trade threats.
- **Expert Consultations:** Input from key stakeholders, including government officials, NGOs, and experts

METHODOLOGY FOR DATA ANALYSIS

CatByte[1] is a global resource developed to track global trade in eight species of big cats (tigers, snow leopards, clouded leopards, leopards, lions, cheetahs, jaguars, and pumas) covering both CITES trade data and reported illegal activity. CatByte allows users to access and query trade data across these eight species, helping to make sense of fragmented data. Currently, the database contains 35,000 trade records across 124 countries, spanning 25 years.

The platform highlights threats to big cats by revealing patterns, trends, and interconnections across species. Data are compiled from multiple open-source and structured datasets[2], including:

- CITES Trade Database – all trade records, hereafter referred to as CITES trade data
- Documented illegal trade – including seizure reports, poaching incidents, and prosecution details

To minimise duplication across sources, we present:

- CITES legal trade records (excluding Source Code I),
- CITES confiscations (Source Code I), and
- Open-source seizure, poaching and prosecution records separately.

This approach enables comparison of trends without conflating datasets. The combined figures should be interpreted as a minimum indicator of detected trade, acknowledging that some seizures may appear in more than one source.

[1] **https://catbyte.org/** CatByte is a free resource, independently managed by Go Insight, and is available to conservation and government agencies working on big cat trade issues.

[2] **See Annex VI for more details on the CatByte methodology**

CHAPTER 1

Conservation Status and Trade Dynamics in Asian Big Cats

In this report, the term trade in refers to the combination of CITES trade data and illegal trade records, allowing both forms of activity to be examined side by side. Viewed together, these perspectives reveal how shifts in regulation or demand in one type of trade can drive activity in the other. This integrated approach strengthens enforcement, exposes vulnerabilities, and supports more effective conservation strategies for ABC species.

However, it is important to note that the dataset should not be interpreted as a measure of absolute trade volumes. Reporting gaps, detection inconsistencies, and differences in enforcement capacity and media coverage across ABC range States influence data comparability.

METHODOLOGY APPLIED FOR DATA ANALYSIS ACROSS ASIAN BIG CAT RANGE STATES

The data analysis draws on primary data sources compiled within CatByte including data shared by EIA and TRAFFIC and incident data identified through open-source research[3].

Trade activity related to Asian big cats (ABC) was analysed across 33 ABC range States recognised by CITES (Figure 1).

Figure 1 Asian big cats across 33 range states

RANGE STATE	TIGER	SNOW LEOPARD	CLOUDED LEOPARD*	LEOPARD**	LION**	CHEETAH**
Afghanistan		x		x		
Armenia				x		
Azerbaijan				x		
Bangladesh	x		x	x		
Bhutan	x	x	x	x		
Cambodia	x		x			
China	x	x	x	x		
Georgia				x		
India	x	x	x	x	x	African (introduced)
Indonesia	x		x	x		
Iran				x		x
Iraq				x		
Israel				x		
Kazakhstan	x	x				
Kyrgyzstan		x				
Lao PDR	x		x	x		
Malaysia	x		x	x		
Mongolia		x				
Myanmar	x		x	x		
Nepal	x	x	x	x		
Oman				x		
Pakistan		x		x		
Russia	x	x		x		
Saudi Arabia				x		
Sri Lanka				x		
Tajikistan		x		x		
Thailand	x		x	x		
Turkiye				x		
Turkmenistan				x		
UAE				x		
Uzbekistan		x		x		
Viet Nam	x		x	x		
Yemen				x		

*The IUCN SSC Cat Specialist Group's revised taxonomy of the Felidae (Kitchener *et al.* 2017) splits the clouded leopard into two species: N. nebulosa on the Asian mainland and N. diardi on the islands of Borneo and Sumatra. However, CITES Appendix I includes both as a single species N. nebulosa.

**Africa comprises most of these species' ranges. Asian subspecies were last assessed in 2008: *A.j. venaticus* CR (Jowkar *et al.* 2008) and *P.l. persica* EN (Breitenmoser *et al.* 2008). P.l persica is no longer considered a valid subspecies by the IUCN SSC Cat Specialist Group and has been subsumed in the subspecies P.l. leo with North African lion populations (Kitchener *et al.* 2017)

[3] **See Annex II for further details on CatByte's methodology**

[4] CITES's recognised ABC range states **https://cites.org/sites/default/files/eng/cop/18/doc/E-CoP18-071-01.pdf** (p13)

CHAPTER 1

Conservation Status and Trade Dynamics in Asian Big Cats

ABC SPECIES INCLUSION CRITERIA

To reduce the risk of over- or under-representing trade dynamics for some species of big cats, the following inclusion criteria were applied. These filters were designed to ensure the reliability of the analysis. For species found only in Asia, all seizure data were included due to the absence of overlapping non-Asian subspecies. In contrast, species like leopards and cheetahs, which occur in both Africa and Asia, required geographic and taxonomic filters to avoid conflating African-origin incidents with Asian dynamics. This methodology ensures the analysis provides an accurate picture of Asian big cat trade as far as is possible.

Include all seizures (regardless of location)

This applies to species native exclusively to Asia, where there is no risk of overcounting due to trade involving non-Asian subspecies:

- Tiger *(Panthera tigris)*
- Snow leopard *(Panthera uncia)*
- Clouded leopard *(Neofelis spp.)*

Apply geographic/species filters

To avoid conflating trade involving African and Asian subspecies of big cats, the following filters were applied:

- Asiatic cheetah *(Acinonyx jubatus ssp. venaticus)*
  Include only seizures occurring in Iran, where the critically endangered Asiatic cheetah may be involved.
- Lion *(Panthera leo leo)*
  Include only seizures or incidents that explicitly state Asiatic lions, regardless of where the incident occurred.
- Leopard *(Panthera pardus)*
  Include only seizures from Asian range States, or where the subspecies (e.g. Amur, Javan) is explicitly identified.

Between June and July 2025, a data review was conducted for each ABC range State for which data were held. This process involved consultation with the designated contact points for each CITES Management Authority or Law Enforcement agency as listed on the CITES website. The relevant data were shared with these contacts, who were given one month to review and provide feedback. Responses were only received from Afghanistan, Armenia, Bhutan, and Israel, and their feedback was incorporated into the final dataset. No incidents for ABC species were recorded in this dataset for Azerbaijan or Iraq.q.

ESTIMATING THE MINIMUM NUMBER OF BIG CATS IN TRADE

To estimate the minimum number of individual big cats represented in trade, a conservative methodology that translates seized items into the smallest plausible count of animals was applied. Whole-body items such as live specimens, carcasses, skins, and skeletons were counted directly on a one-to-one basis, while partial body parts (e.g. claws, teeth, bones) were converted into minimum estimated reference values. Where seizures included both whole bodies and parts, only the whole-body items were counted to avoid duplication. This approach also helps to reduce the risk of over-counting where different parts of the same animal may have been recorded across multiple seizures. Each conversion was assigned a confidence level high for whole-body items, medium for body parts with species specified, and low where species was unknown, or quantities were ambiguous[6]. Throughout the analysis only estimation based on high confidence levels have been discussed.

TEMPORAL CLASSIFICATION

As the analysis spans a 25-year period, incidents have been categorised into three broad time periods to support temporal comparison and identify shifts in trade patterns over time *(Figure 2)*. These periods are defined as: 'Early' capturing an initial phase of trade activity and limited reporting; 'Middle' reflecting a period of expansion, diversification, and increased online presence; and 'Recent', representing disruption caused by global events such as COVID-19, shifts in enforcement priorities, and the adaptation of trafficking methods. This classification enables the analysis to account for changing trade dynamics, reporting practices, and external pressures across the timeframe.
Figure 2 Temporal Classifications

TIME PERIOD	LABEL	YEARS EARLY
Early	2000–2008	Baseline period, limited reporting, pre-online trade dynamics
Middle	2009–2016	Expansion and diversification, growth in online platforms
Recent	2017–2024	Pre- and post-COVID shifts, increased enforcement visibility

Analytical Framework

The analytical framework used to assess CITES trade data and illegal trade in ABCs comprises two main components:

Part I - presents a high-level analysis of conservation status and global trade dynamics and observed threats for each ABC species.

Part II - presents an analysis of the collective data analysis and threats that apply across all ABCs.

[5] **https://cites.org/eng/parties/country-profiles/af/national-authorities**

[6] **See Annex IV for further details**

PART 1:
CONSERVATION STATUS & GLOBAL TRADE DYNAMICS OF ASIAN BIG CATS

ABCs face a range of threats that continue to challenge their survival. These include habitat loss, prey depletion, human-wildlife conflict (HWC), poaching, and illegal trade in live specimens, their parts, and derivatives. All ABC species are currently listed on CITES Appendix I, which prohibits international commercial trade, and are classified as Vulnerable or Endangered by the International Union for Conservation of Nature (IUCN) Red List (see Figure 3). Despite these protections, illegal trade presents a persistent and significant pressure on their populations.

PART I

Conservation Status and Global Trade Dynamics of Asian Big Cats

Figure 3 IUCN Status and CITES Appendix Listing for Asian Big Cats

ABC SPECIES	IUCN STATUS	CITES LISTING
Tiger *(Panthera tigris)*	Endangered (2022)	Appendix I
Amur tiger *(P.t. altaica)*	Endangered (2022)	Appendix I
Northern Indochinese tiger *(P.t. corbetti)*	Endangered (2022)	Appendix I
Malayan tiger *(P.t. jacksoni)*	Endangered (2022)	Appendix I
Sumatran tiger *(P.t. sumatrae)*	Endangered (2022)	Appendix I
Bengal tiger *(P.t. tigris)*	Endangered (2022)	Appendix I
South China tiger *(P.t. amoyensis)*	Endangered (2022)	Appendix I
Lion (Panthera leo)	Vulnerable (2023)	Appendix I (Indian population)*
Cheetah *(Acinonyx jubatus)*	Critically endangered (2024)	Appendix I
Asiatic cheetah *(A.j. venaticus)*	Critically endangered (2008)	Appendix I
Leopard *(Panthera pardus)*	Vulnerable (2025)	Appendix I
Amur leopard *(P.p. orientalis)*	Critically endangered (2008)	Appendix I
Arabian leopard *(P.p. nimr)*	Critically endangered (2023)	Appendix I
Indian leopard *(P.p. fusca)*	Near threatened (2023)	Appendix I
Indochinese leopard *(P.p. delacouri)*	Critically endangered (2019)	Appendix I
Javan leopard *(P.p. melas)*	Endangered (2021)	Appendix I
Persian leopard *(P.p. tulliana)*	Endangered (2023)	Appendix I
Sri Lankan leopard *(P.p. kotiya)*	Vulnerable (2020)	Appendix I
Snow leopard *(Panthera uncia)*	Vulnerable (2017)	Appendix I
Sunda clouded leopard *(Neofelis diardi)*	Vulnerable (2015)	Appendix I
Clouded leopard *(Neofelis nebulosa)*	Vulnerable (2021)	Appendix I

PART I

Conservation Status and Global Trade Dynamics of Asian Big Cats

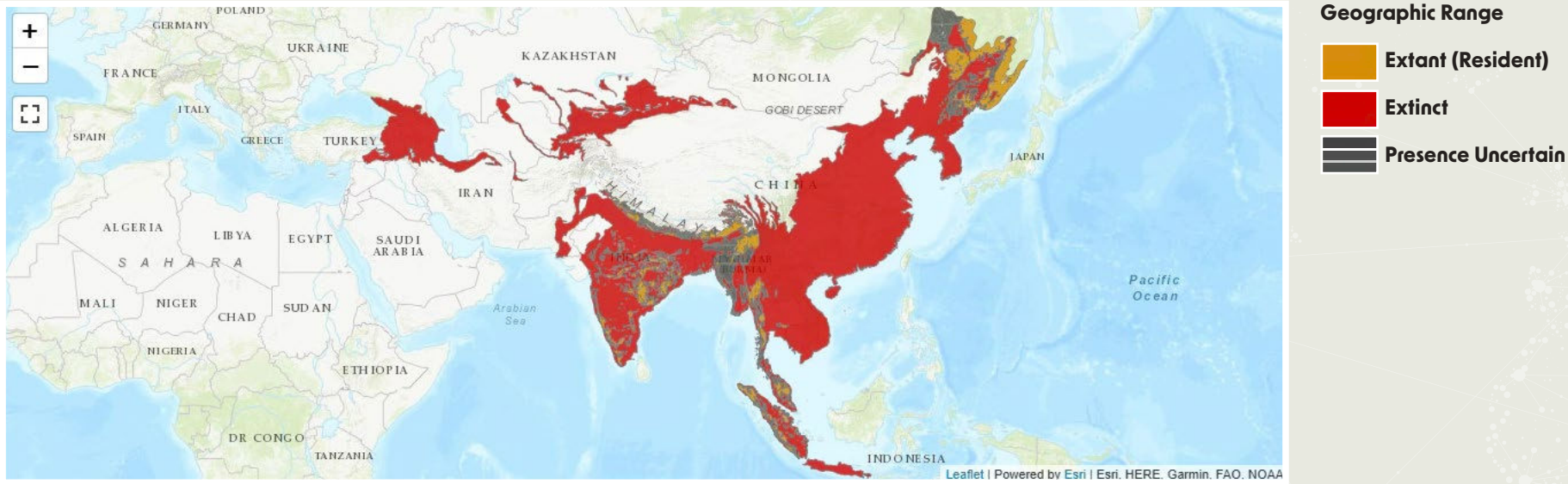
1.1 TIGER *(Panthera tigris)*

Global tiger populations have fallen considerably in the last century with populations in Southeast Asia suffering the most dramatic reduction (IUCN, 2021). The most recent tiger population estimate of between 3,726 and 5,578 individuals is based largely on capture-recapture and occupancy methodologies. Based on IUCN definitions of mature individuals this gives an estimated range of between 2,608 and 3,905 mature individuals, with a best estimate of 3,140 (Goodrich, *et al.* 2022).

Tiger subspecies classification is subject to varying interpretations. While the IUCN Cat Specialist Group has proposed a simplified taxonomy, CITES and some tiger range countries (TRCs) continue to refer to older subspecies distinctions. TRACE recently clarified that the meaningful differentiation of mainland subspecies (e.g., *P. t. corbetti, P. t. jacksoni*) is scientifically uncertain, highlighting the tension between evolving genetic evidence and conservation frameworks[8].

While targeted conservation actions led to population increases in some TRCs countries between 2015 and 2021, notably in Thailand where wild tiger numbers rose to an estimated 179–223 individuals, the species remains classified as Endangered on the IUCN Red List. Core threats to all tiger populations include habitat loss and fragmentation, retaliatory killings due to HWC, and most persistently illegal trade in body parts. Among the surviving tiger populations, those traditionally referred to as Indochinese (*P. t. corbetti*) and Malayan (*P. t. jacksoni)* tigers have shown concerning trends, including extirpations and steep population declines (Rasphone et al. 2022). However, recent genetic studies and taxonomic revisions challenge the validity of these subspecies' distinctions, suggesting that mainland Southeast Asian tigers may represent a single lineage.

Figure 4 Tiger geographic range (2022)



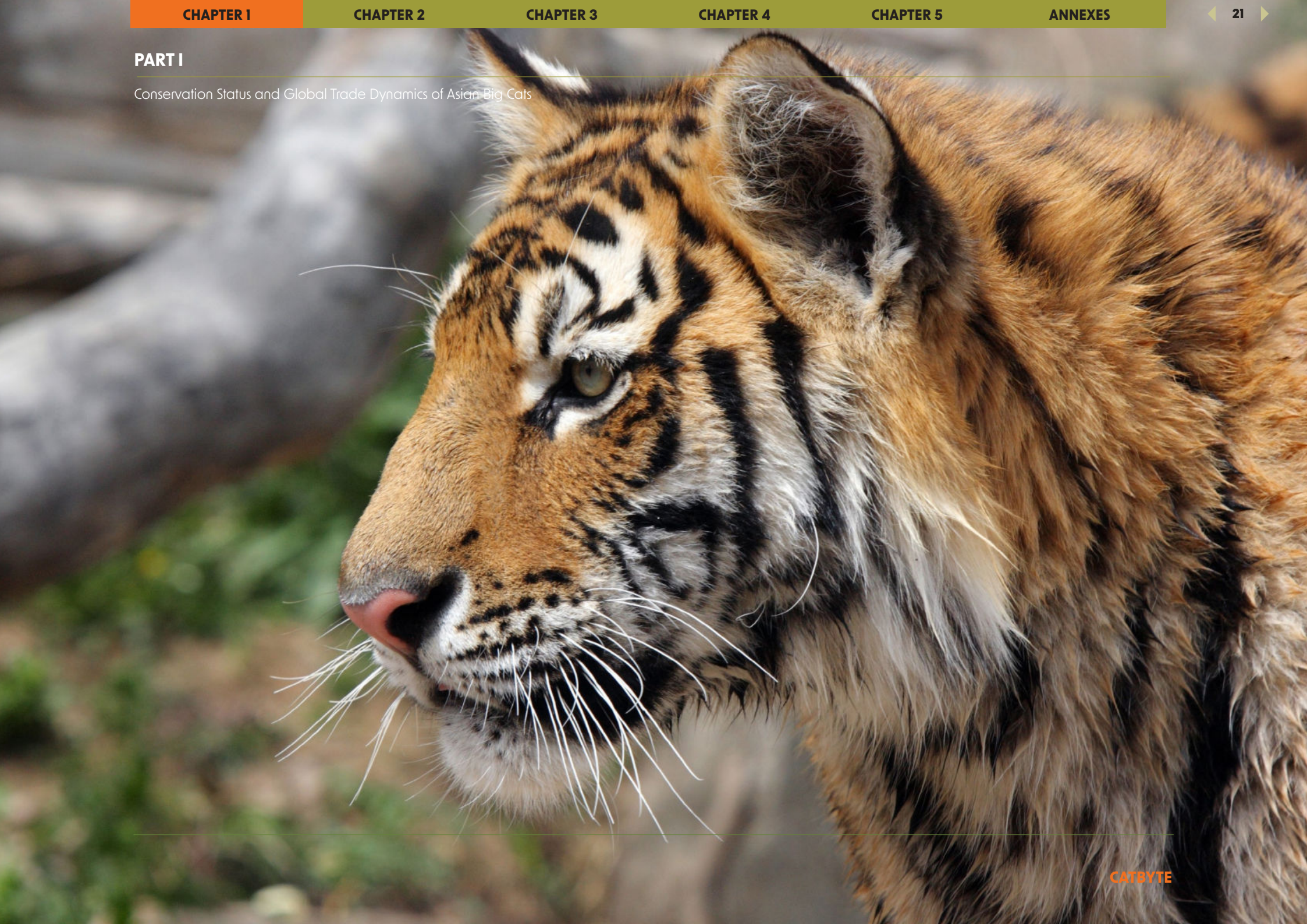
[7] IUCN SSC Cat Specialist Group 2022. Panthera tigris. The IUCN Red List of Threatened Species. Version 2025-1

[8] The IUCN Cat Specialist Group's revised taxonomy (2017) recognizes only two subspecies: P. t. tigris (mainland) and P. t. sondaica (island). CITES references mainland Southeast Asian tigers as part of a Southeast Asian lineage, while some TRCs still use older classifications such as P. t. corbetti and P. t. jacksoni. TRACE has recently questioned the scientific basis for distinguishing these mainland subspecies, citing limited genetic divergence and overlapping traits.

[9] https://www.worldwildlife.org/stories/wild-tiger-numbers-increase-in-thailand

PART I

Conservation Status and Global Trade Dynamics of Asian Big Cats



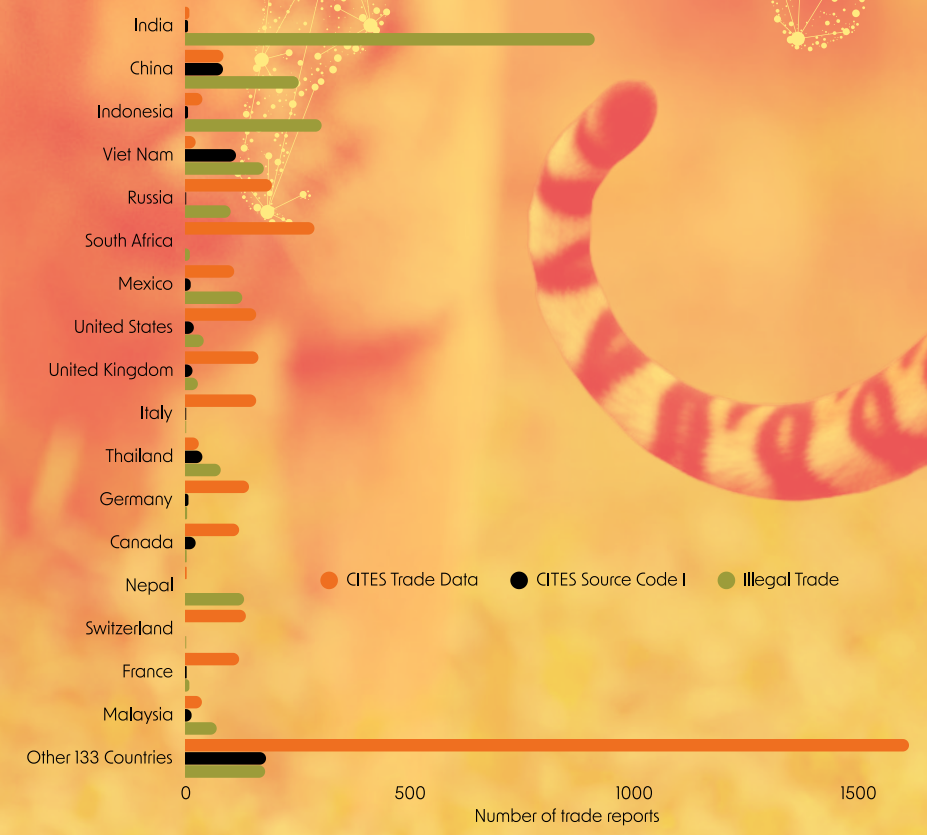
GLOBAL TIGER TRADE DYNAMICS

Between 2000 and 2024, an estimated 6,430 transactions of tiger specimens (live, parts, and derivatives) were reported across 147 countries, combining both CITES trade data (n = 3,407), CITES Source Code I (n = 511) and records of illegal activity (n = 2,512). Yet the trade is highly concentrated: just 17 countries account for 70% of all trade records, eight of which are tiger range States (Figure 5). The disproportionality is more evident for documented illegal trade, where these 17 countries represent 93% (n = 2,335) of the global data, compared to just 5% (n = 1,794) for CITES-reported trade, and 65% (n = 332) for Source Code I records. This indicates that CITES reported trade is more widely distributed across 131 countries, while illegal activity has been recorded in only 57 of the 147 countries.

The highest number of CITES trade records (except Source Code I) occurred in 2001 (n = 227) and appears to have declined since. The number of illegal trade incidents, however, reached its peak in 2021 (n = 217) and has consistently remained above the number of CITES trade records since 2015.

Reporting of CITES Source Code I records only was highest in 2010 (n = 34) and has declined since then *(Figure 6)*.

Figure 5 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of tiger specimens documented in trade by top volume countries (2000-2024)



[1] CITES Trade Data may be lower for 2024 due to a delay in reporting

The highest number of CITES trade records (except Source Code I) occurred in 2001 (n = 227) and appears to have declined since. The number of illegal trade incidents, however, reached its peak in 2018 (n = 144) and has consistently remained above the number of CITES trade records since 2015. Reporting of CITES Source Code I records only was highest in 2010 (n = 34) and has declined since then *(Figure 6)*.

Over the past 25 years, live tigers account for the largest number of CITES trade records, while skins are most frequently recorded in illegal trade incidents. Bodies, bones, claws, and teeth are also regularly documented in illegal trade, though to a lesser extent. By comparison, derivatives, teeth and claws largely feature under Source Code I *(Figure 7)*.

Since 2000, over 7,500 live tigers have been recorded in trade, with the majority documented through CITES trade data (91% / 6,893 tigers), over 80% of this trade is for circus and zoo purposes. A smaller share is recorded through illegal trade (8% / 843 tigers) and Source Code I (0.5% / 41 tigers).

Non-range States including South Africa (617), the United States (495), and Mexico (624) together account for 24% (1,737) of this total. While all three countries appear in both CITES and illegal trade records, the pattern differs: for South Africa and the United States, most records stem from CITES trade data, whereas in Mexico a much higher percentage is documented in seizures (32% / n = 197).

Figure 6 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of tiger specimens documented in trade by year (2000-2024) [10]

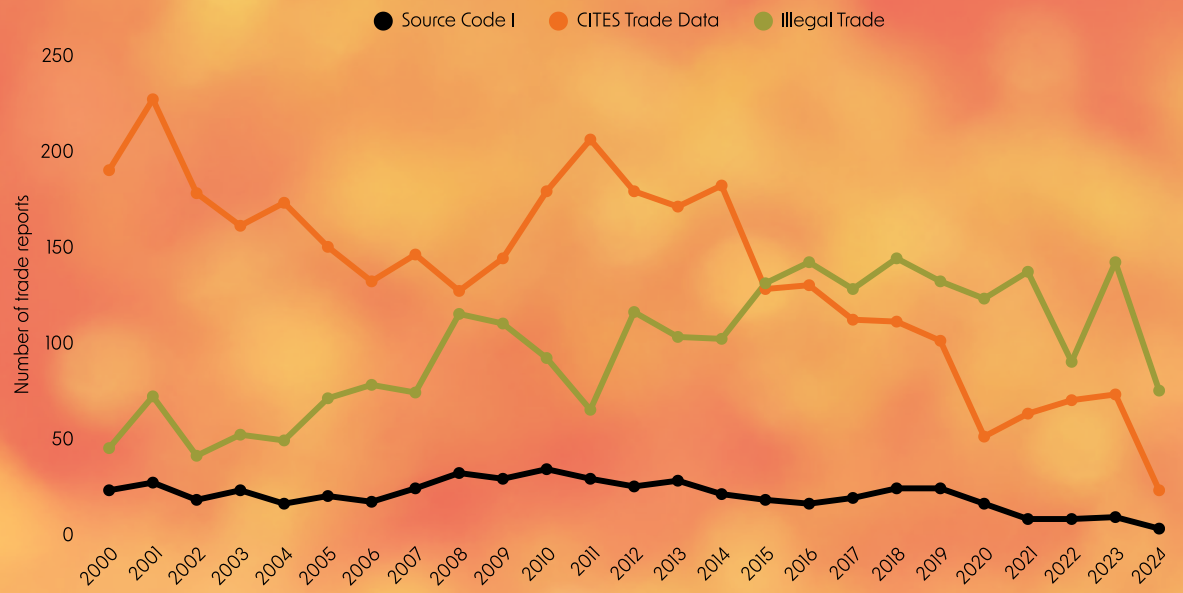
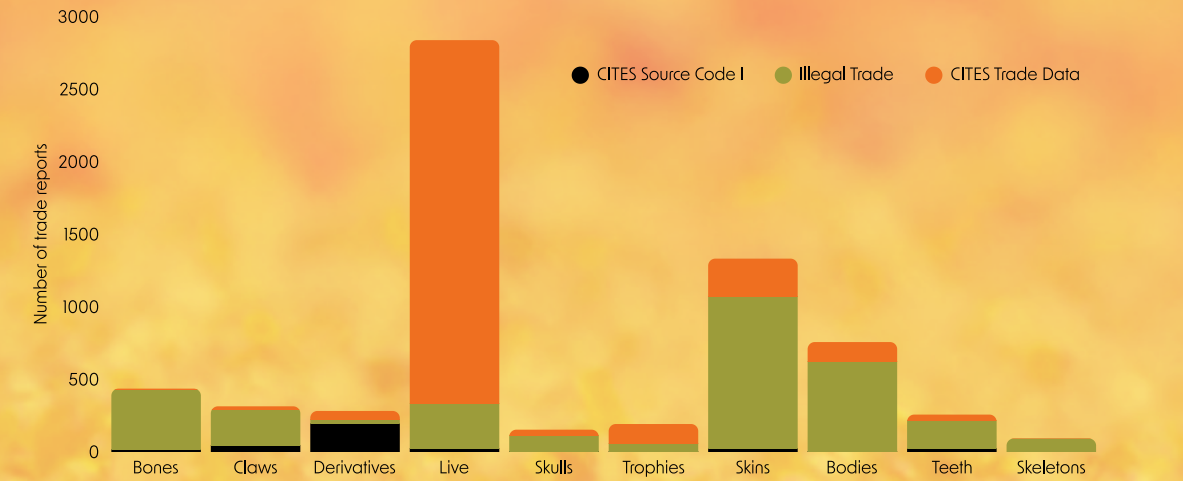


Figure 7 Top Ten tiger specimens in trade by number of illegal trade incidents and CITES trade data reports (including Source Code I) (2000-2024)



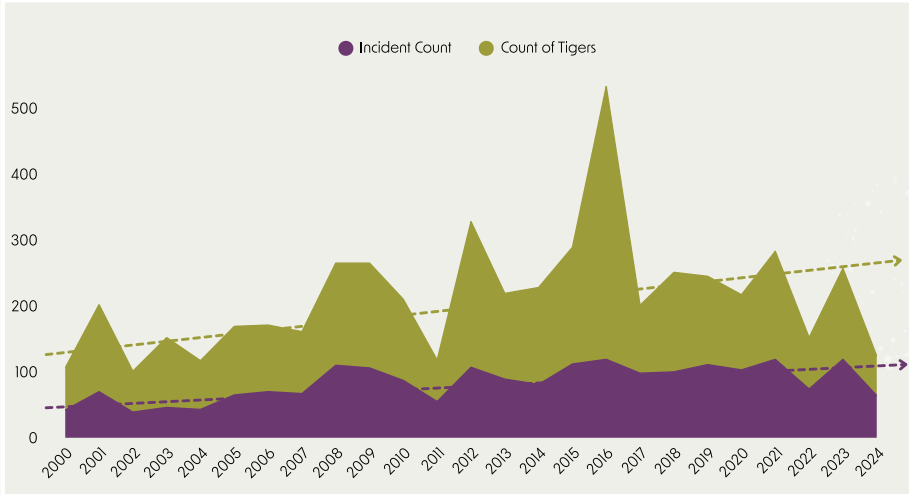
PART 1

Conservation Status and Global Trade Dynamics of Asian Big Cats

ILLEGAL TIGER ACTIVITY ACROSS ABC RANGE STATES

In the longer-term, the reporting of illegal trade incidents[12] (n=2,097 in total) and the number of tigers (ranging from a minimum of 3,269[13] to a maximum count of 4,402) documented tigers in illegal trade has increased across ABC range states *(Figure 8)*. This trend may reflect factors such as enhanced data collection, improved reporting mechanisms, and increased law enforcement activity, rather than a true change in the underlying level of criminal activity.

Figure 8 The number of illegal trade incidents and estimated minimum number of tigers found in illegal trade (2000-2024)



Most tigers were documented in illegal trade during the middle period which relates to 2009-2016 *(Figure 9)*.

Higher values are recorded during that period from Thailand (Tiger Temple incident mostly refers here) and is a key contributing factor.

Notable declines are observed for China and Malaysia in the most recent period (2017–2024). A major seizure in 2012 involved 12,090 bottles of tiger bone wine and 18,660 bottles of leopard bone wine; seizures of this scale have rarely been reported since.

Figure 9 Estimated minimum number of tigers documented in illegal trade across three time periods (2000-2024)

COUNTRY OF INCIDENT	EARLY	MIDDLE	RECENT	TOTAL
Armenia			1	**1**
Bangladesh	15	38	5	**58**
Bhutan	3	3		**6**
Cambodia	7	3	1	**11**
China	158	210	68	**436**
India	376	290	375	**1041**
Indonesia	88	185	121	**394**
Iran		1		**1**
Lao PDR	8	12	11	**31**
Malaysia	49	66	23	**138**
Myanmar		3	2	**5**
Nepal	38	94	34	**166**
Pakistan			1	**1**
Russian Federation	79	71	45	**195**
Thailand	42	357	70	**469**
Turkiye			1	**1**
United Arab Emirates	2	1	2	**5**
Viet Nam	27	100	182	**309**
Total	**892**	**1434**	**942**	**3268**

[12] Illegal trade includes seizures, poaching and prosecutions related to illegal tiger trade
[13] Only the estimated minimum count will be used in the analysis
[14] Early period (2000-2008), Middle (2009-2016) and Recent period (2017-2024)

PART 1

Conservation Status and Global Trade Dynamics of Asian Big Cats

There is a gap in data for Bhutan during the most recent period. According to the Department of Forest and Park Services' Annual Forest Statistics 2022, 23 wildlife poaching cases were recorded that year. While the statistics do not provide a species-specific breakdown, they indicate that tigers, Himalayan black bears, and other species were among those poached. In Bangladesh, the number of tigers documented in illegal trade during the most recent period has declined markedly compared to the previous period (n = 27). Recent research analysing tiger trade in the country draws on a range of sources to provide a more comprehensive assessment of current levels and is presented as Case Study 2. The findings indicate that Bangladesh plays a more prominent role in the regional and global tiger trade than was previously understood.

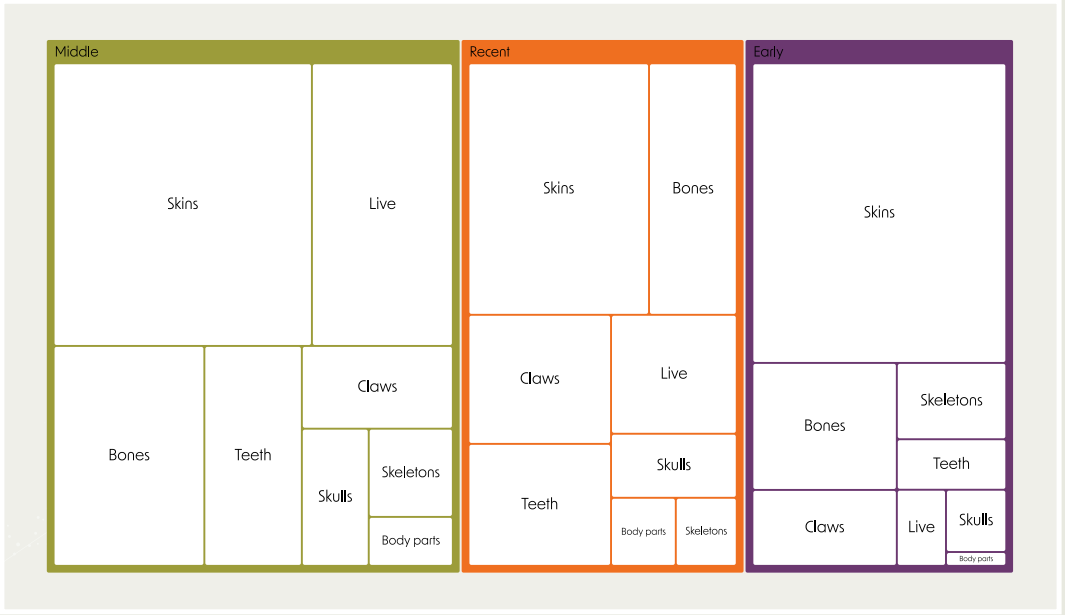
reflects a shift in tiger trade dynamics across ABC range States. While the skin trade remains important, seizures increasingly include claws, teeth, whiskers, and bones, suggesting trafficking now targets smaller, more concealable parts. At the same time, the presence of live tigers in trade has grown, with notable spikes in 2012, 2016, and since 2020.

The volume of tiger bones and bone products in Illegal trade is estimated to equate to a minimum of 384 tigers across range States and is largely attributed to: India (28% / n = 108 tigers), China (20% / n = 80 tigers), Viet Nam (15% / n = 57 tigers). There appears to be no decline in this trend, and it is explored in more detail in the next section.

ILLEGAL TIGER TRADE DISCUSSION

The intensification of illegal tiger trade leading up to and into the early 2000s, largely driven by demand for body parts among Chinese communities both within China and abroad for use in traditional medicine

Figure 10 Top tiger parts and products in trade based on an estimated minimum tiger across ABC range States (three time periods 2000-2024)



(CITES, 2018) led to significant population declines across Southeast Asia (Somphot et al. 2024). Tigers have been extirpated from Cambodia, Lao PDR, and Viet Nam, largely due to habitat loss, conflict, and trade. Remaining populations in Thailand, Malaysia, Myanmar, and Sumatra are small and isolated. By contrast, populations in China, India, Nepal, Bhutan, Russia, and regions such as Thailand's Western Forest Complex show signs of recovery, demonstrating the impact of targeted anti-poaching measures and habitat protection (Duangchantrasiri et al. 2016; DoFS, 2023; Amur Tiger Center, 2023).

In the context of trade, tigers have become central to wider concerns about the use of body parts from other big cats. As wild tigers become increasingly difficult to source, parts from other species primarily leopards, which are an official substitute for tiger in traditional Chinese medicine, and lions, whose bones are sometimes laundered as tiger bones or used as a supplementary source, are exploited as replacements (Villalva and Moracho, 2019; UNODC, 2024). Other research also highlights that lion bones enter Asian markets as substitutes for tiger, including in the production of traditional products such as "lion bone cake" (TRAFFIC, 2015). This trend not only threatens other big cat species but can also complicate law enforcement intervention. While raw or worked body parts (such as bone, teeth or claws marketed as tiger are usually straightforward to detect and confiscate, those marketed as lion may require further

investigation to determine if substitution or laundering has taken place. Challenges are particularly evident with processed derivatives, where legal provisions, implementing regulations, or officer guidance may be insufficient, making detection, confiscation, and prosecution more problematic.

Tiger parts continue to command high prices on the illegal market, with skins, bones, and claws particularly sought after by affluent consumers for display and traditional use (IUCN Cat Specialist Group, N.D.). Although most Asian countries prohibit tiger trade the circulation of unregulated or mislabelled products raise concerns about continued illegal activity. These dynamics underscore the complexity of tiger conservation in Asia, where effective responses must address both supply-side enforcement and persistent consumer demand, alongside evolving trade routes and criminal networks.

Examples from Cambodia, South Korea, and Myanmar illustrate this spectrum of challenges. In Cambodia, a raid by the Wildlife Rapid Response Team and a deputy prosecutor in Phnom Penh in March 2020 led to the arrest of seven suspects (five Chinese and two Cambodian nationals) and the confiscation of tiger bones alongside ivory, pangolin scales, and seahorses. The case highlighted the involvement of transnational organised crime (TOC) networks, with retail outlets owned and operated by Chinese nationals catering to Chinese tourists.

By contrast, South Korea represents a case of policy-driven progress. Once one of the largest importers and manufacturers of tiger bone products, it banned commercial trade in 1994 following its accession to CITES. Research published in 2024 (Elves-Powell et al. 2024) shows that trade has substantially declined since the 1990s, supported by expert surveys and CITES trade data, due both to the ban and broader socioeconomic changes. Nonetheless, illegal trade persists at a smaller scale, with tiger and leopard skins, and tiger bone wine reported for sale on online marketplaces. Moreover, reports of South Korean nationals' involvement in illegal trade in Southeast Asia indicates that the country's role has not been eliminated entirely.

Myanmar demonstrates the risks of data gaps as fewer than ten tiger-related seizure incidents have been reported as occurring in-country over the past 25 years, despite its well-documented role as a key source, transit and destination country for wildlife products. This limited detection and reporting of illegal trade may reflect both weak enforcement capacity and the delayed implementation of Myanmar's 2021–2025 action plan to counter illegal wildlife trade (IWT) (McEvoy *et al.* 2022). Monitoring of online IWT shows that such trade is expanding, particularly via Facebook (WWF Asia-Pacific, 2021). While relatively few tiger products have been recorded in their analysis, online advertisements targeting Chinese-speaking audiences and offering tiger bones alongside rhino horn and elephant skin suggest that cross-border demand continues to shape Myanmar's domestic market.

Commercial breeding of tigers remains a persistent threat to conservation across the region. In Thailand, large-scale captive breeding facilities for tigers and lions supply animals for both domestic use and cross-border trade (Fourage, et. al, 2025, Wong and Krishnamsamy, 2022). While many operate under legal frameworks, concerns persist that deaths, surpluses, or products derived from captive animals such as bones and body parts may enter private ownership or online markets.

Viet Nam illustrates how cross-border supply feeds ongoing risks. Tigers from captive breeding operations in Thailand and Lao PDR have been detected in illegal facilities within Viet Nam, where they are raised for products such as tiger bone glue or potentially for live animal trade. On 4 August 2021, the Environmental Police Department of Nghe An Provincial Police raided two illegal tiger facilities in Yen Thanh district, seizing 17 adult tigers. At the first location, 14 tigers were found reportedly purchased from Lao PDR; at the second site, three tigers were kept in a 120 m² basement. One operator, Nguyen Van Hien, was sentenced to seven years in prison.

CASE STUDIES

The following three case studies highlight the adaptive, transnational nature of illegal tiger trade. They show how trafficking networks exploit domestic and cross-border routes, often hidden from enforcement, and reveal the socio-economic and logistical factors driving demand. Together, they underscore the need for integrated approaches to disrupt trade and support tiger conservation and law enforcement efforts.

Case Study 1. Cross-Border Tiger Trafficking & Financial Crime Detected in Nepal [18]

In 2021, Nepal's Central Investigation Bureau arrested four Chinese nationals in Kathmandu following the receipt of intelligence about an illicit wildlife transaction. The investigation uncovered evidence of wildlife trafficking, including a large tiger skin, tiger teeth, 20 musk glands, and other wildlife products. Authorities also seized ATM cards from 35 different banks, along with vouchers and bills totalling NPR 800,000 (USD 5,632), indicating potential involvement in banking fraud.

[15] **https://www.wildlifealliance.org/ivory-and-pangolins-the-dark-underbelly-of-cambodias-wildlife-trade/**
[13] **https://vietnamnet.vn/en/17-tigers-illegally-caged-in-nghe-an-763250.html**
[14] **https://news.tuoitre.vn/vietnam-court-jails-man-for-seven-years-for-illegally-raising-14-tigers-at-home-10366015.htm**

The hotel itself had been operating as a mini-casino, with electronic gambling tables and 410 Chinese-language mahjong tiles, suggesting that the suspects were engaged in multiple illicit activities simultaneously. While the primary operator was reportedly not present and believed to have returned to China, her associates were arrested and investigated. This case highlights the complex nature of cross-border criminal networks, demonstrating how wildlife trafficking, financial fraud, and illegal gambling can be interconnected.

Case Study 2. Moving Beyond Seizure Data to Understand the Illegal Tiger Trade in Bangladesh

Many assessments of tiger trade rely on seizure data, which capture only a fraction of criminal activity. Although Bangladesh accounted for just 1% (n = 35) of recorded incidents across Asian big cat range States in this review, Uddin et al. (2023) show that integrating multiple sources reveals a far greater role in the trafficking chain. Their approach combined 19 years of Bangladesh Forest Department seizure records with qualitative insights from 163 interviews, including poachers, traders, enforcement officers, and community members, demonstrating the importance of looking beyond seizures to uncover hidden dynamics.

KEY FINDINGS

- **Bangladesh as a Dual-Role Country**
  Historically a source country, Bangladesh has evolved into both a consumer market and a trafficking hub for tiger parts including skins, bones and skulls.
- **Increasing Domestic Demand**
  A growing elite class in Bangladesh fuels the demand for these items used not only for traditional medicine but also as status symbols through ornamental items such as skulls and skins.
- **Emergence of Trafficking Networks**
  After the state crackdown on pirate poachers in the Bangladesh Sundarbans, more than 30 poaching syndicates were identified. These networks often use logistics companies or exploit wildlife permits to conceal illegal operations.
- **International Reach**
  Bangladesh is implicated in tiger-part commerce with at least 15 countries (India, China, Malaysia, plus several Western and diaspora destinations).
- **Conservation Implications and Limits**
  Although some progress has been made, enforcement remains weak. The research urges stronger inter-agency coordination, access to resources, and participation in international fora to disrupt trafficking more effectively.

STRATEGIC IMPORTANCE OVER NEXT DECADE

The number of tigers in the Bangladesh Sundarbans, the country's only tiger habitat, increased from 114 in 2018 to 125 in 2024 (IUCN, 2025). This positive trend underscores the critical need for robust national strategies to reduce trade opportunities and disrupt trafficking networks, positioning Bangladesh as a focal country for regional and global conservation efforts.

Case study 3. Converging Crimes: Fishing Vessels and the Malaysia–Viet Nam Tiger Trade Nexus

Fishing vessels are being used to transport tiger products and people from Malaysia into Viet Nam (Pickles *et al.* 2025). Investigations indicate that vessels have employed children and have been associated with other forms of exploitation and human rights abuses, according to offender interviews conducted in 2021. This route has also served as a means for undocumented Vietnamese migrant workers to return home, effectively bypassing immigration controls. Although precise estimates are challenging, fishing expeditions reportedly occur every 3–4 months, with each voyage carrying as many as 40–50 undocumented passengers. It should be noted that the COVID-19 pandemic may have exacerbated this situation, as trawlers may have provided one of the few available routes home.

As much as 80% (n=27) of Malaysian-based Vietnamese expatriates interviewed admitted that they either arranged for or personally carried bone glue back to Viet Nam, either as gifts or for onward trade. This convergence of criminal and economic pressures may arise from migrant workers receiving lower-than-expected wages or arriving in Malaysia indebted to recruitment agents, prompting them to seek alternative income streams through IWT.

These operations, facilitated by Vietnamese brokers, often maintain trusted relationships with staff within Malaysian agencies. Brokers connect Malaysian-based wildlife traffickers with Vietnamese fishing personnel and can coordinate the transport of illegal wildlife products in passenger luggage, sometimes with or without the knowledge of the skippers. The cost of transport may depend on personal relationships, with acquaintances occasionally carrying products free of charge.

Across these examples, tiger-related crime emerges as a persistent threat and illustrates both the transnational nature of the trade and the limitations of current reporting. Findings can be influenced by enforcement activity rather than a complete picture of criminal operations. Where enforcement is stronger, more activity is detected; where capacity is weaker, criminal activity may not be as well understood.

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Conservation Status and Global Trade Dynamics of Asian Big Cats

1.2 SNOW LEOPARD *(Panthera uncia)*

The snow leopard is considered to be one of the most elusive and vulnerable ABC species, with efforts ongoing to establish a robust estimate of the global population. Currently, while various estimates are available [4,080-6,500 (McCarthy & Chapron 2003); 4,500-7,500 (Jackson *et al.* 2010), and 3,920-6,390 (**Snow Leopard Working Secretariat 2013**)], IUCN provides a global snow leopard population of 2,710-3,386 mature individuals, based on conservative estimates of a minimum population of ~4,000.

In 2017, the IUCN reclassified the species from Endangered to Vulnerable. Although certain areas report signs of local population stability, overall numbers are projected to decline by at least 10% over the next three generations. This is largely due to declining prey availability, increasing conflict with humans, encounters with feral dogs, climate change, and ongoing illegal trade activity (Snow Leopard Trust, 2024; Dorji & Powrel, 2022; McCarthy et al. 2017, Xia et al. 2025).

Experts' known cases and logical guesses from snow leopard range countries revealed that 221-450 snow leopards have been poached annually since 2008 (Nowell *et al.* 2016). If a total population of snow leopards of about 4,000 individuals (Zakharenka, *et al.* 2016) is considered, up to 16% of the total population is being poached annually. If the numbers are close to reality, the proportion of the poached individuals will have a significant impact on the population of the snow leopard. As such, there is broad agreement on the need for expanded, targeted efforts to safeguard remaining populations (Mallon & Jackson, 2017). However, given that these estimates are now several years old, updated data are urgently needed to assess current poaching levels.

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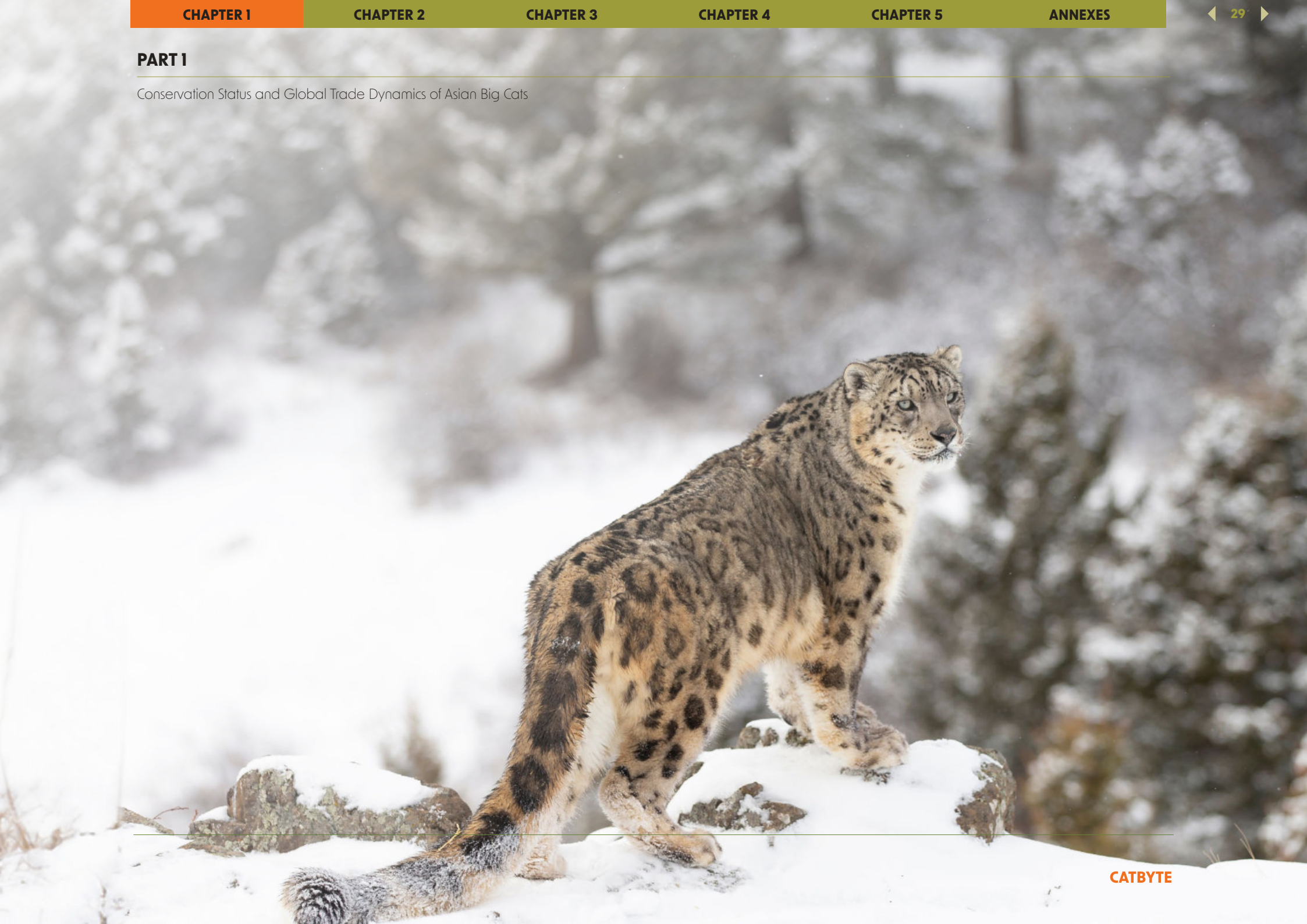
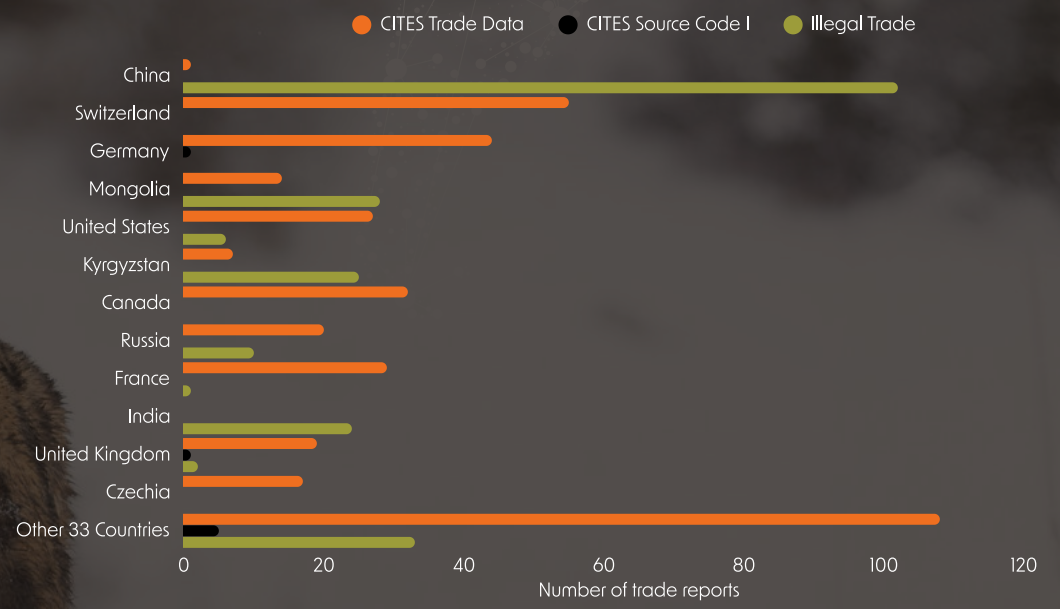


GLOBAL SNOW LEOPARD TRADE DYNAMICS

Between 2000 and 2024, an estimated 611 transactions of snow leopard specimens (live, parts, and derivatives) were traded across 45 countries, combining both CITES trade data (n = 373), Source Code I (n = 7) and records of illegal activity (n = 231). Yet the trade is highly concentrated: just 12 countries account for 76% of all transactions (n = 456) (Figure 11). The disproportionality is more evident for illegal trade, China accounts for 44% (n = 102) during the 25-year period – though share has declined since 2016. Mongolia (12% / n = 28) and India (10% / n = 24) are also report high numbers of illegal trade incidents.

Figure 11 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of snow leopard specimens documented in trade by top countries (2000-2024)



[19] CITES Trade Data may be lower for 2024 due to a delay in reporting

Long-term trends in snow leopard specimens recorded in CITES trade data and illegal trade incidents show similar patterns, with peaks in 2015 (driven mainly by live snow leopards in CITES records) and in 2016 (linked to seized skins in China and Russia). Since then, both datasets indicate a decline in reported cases *(Figure 12)*.

Since 2000, live snow leopards account for the majority of records when combining CITES trade data and illegal trade incidents *(Figure 13)*, with most of these recorded in the CITES trade. Skins represent the next most common category of report, primarily linked to illegal trade, a pattern that is also observed for bones, bodies, and skulls. In 2019, one snow leopard skin also features in CITES trade data, under Source Code I exported from Bhutan for import into Germany.

Figure 12 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of snow leopard specimens documented in trade by year (2000-2024) [19]

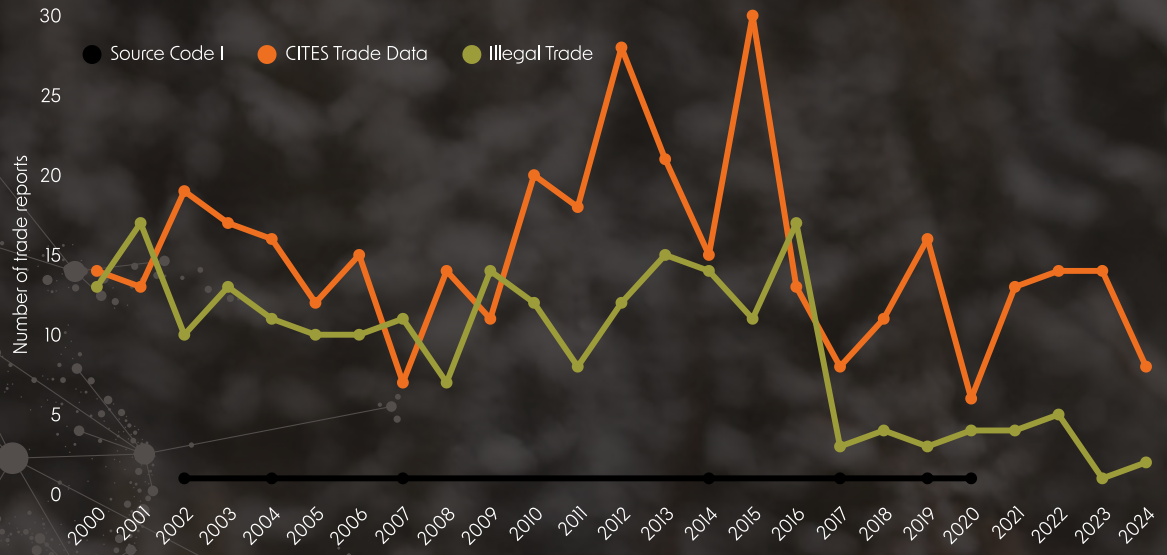


Figure 13 Top ten snow leopard specimens in trade by number of illegal trade incidents and CITES trade data reports (including Source Code I) of snow leopard specimens (2000-2024)

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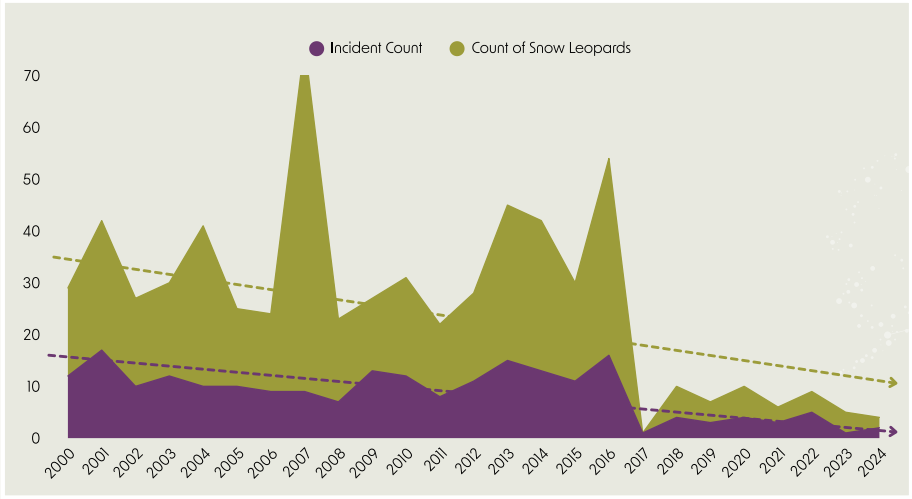
Conservation Status and Global Trade Dynamics of Asian Big Cats

ILLEGAL SNOW LEOPARD ACTIVITY ACROSS ABC RANGE STATES

Figure 14 presents the reported number of snow leopard incidents (n=218) and the estimated number of snow leopards found recorded in illegal trade (ranging from a minimum count n=430 to a maximum count n = 467). In regard to the estimated number of snow leopards in illegal trade, these figures are strongly influenced by two high-volume skins seizures in 2007 and 2016, both of which took place in China, seizures of this scale have seldom occurred since 2016.

Figure 14 The number of incidents and estimated minimum number of snow leopards found in illegal trade (2000-2024)



According to WWF-Mongolia's unpublished 10-year environmental crime analysis (2013–2023), a significant increase in illegal snow leopard trade was recorded in 2019 and June 2020. However, this increase of snow leopard poaching, and illegal trade cases does not necessarily indicate a rapid increase in poaching itself. Instead, it may reflect enhanced investigations and cooperation among law enforcement agencies and/or a growing demand for snow leopard body parts as substitutes for increasingly scarce tiger and other rare wildlife parts.

This potential gap in the reporting for Mongolia should also be taken into consideration in Figure 15, which shows more clearly where reductions in reported snow leopard illegal

Figure 15 [20] Estimated minimum number of tigers documented in illegal trade across three time periods (2000-2024)

COUNTRY OF INCIDENT	EARLY	MIDDLE	RECENT	TOTAL
Afghanistan		2		**2**
China	135	120	8	**263**
Georgia		1		**1**
India	18	13		**31**
Kyrgyzstan	18	6	5	**29**
Mongolia	22	10	8	**40**
Nepal		10	2	**12**
Pakistan	3	4	6	**13**
Russian Federation	17	9		**26**
Tajikistan	1	5		**6**
United Arab Emirates	5			**5**
Uzbekistan	2			**2**
Total	**221**	**180**	**29**	**430**

trade have occurred across ABC range States. Notably, no snow leopards were recorded in illegal trade during the most recent period in several countries where they were once prevalent, including China, India, and Russia. However, it should be noted that changes in seizure patterns may reflect the impact of specific in-country enforcement actions rather than an actual decline in illegal trade.

The limited number of reported incidents during the most recent period *(Figure 14)*, which relates to 23 wildlife trade incidents (equating to 29 snow leopards) compared with 93 incidents (180 snow leopards) during the previous period (2009-2016), underscores the need to broaden data sources and apply additional research methods to inform recent insights into the current threat levels facing snow leopards.

[20] Early period (2000-2008), Middle (2009-2016) and Recent period (2017-2024)
[21] **https://k.sina.com.cn/article_1655444627_62ac149302001lyq6.html?from=local** (link no longer exists)

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Conservation Status and Global Trade Dynamics of Asian Big Cats

A review of snow leopard commodities shows that the illegal trade in skins remains the primary concern *(Figure 16)*. Recent cases have been recorded in China, Mongolia, Pakistan, Kyrgyzstan, and Nepal, though the overall volume is low compared with other big cat trade.

Indications of the presence of other snow leopard commodities in trade include claws, bones and live individuals warrant closer monitoring.

DISCUSSION OF SNOW LEOPARD TRADE THREATS

The demand for snow leopard skins represents both a persistent and current threat. Notably, in 2023, four snow leopard skins suspected to belong to a mother, and her three cubs were intercepted in transit to Islamabad, Pakistan, where they were intended for sale (Naqvi, 2023). In August 2024, a snow leopard skin was confiscated in Lahore (Mehmood, 2024). Several incidents since 2020 may suggest a shift toward more organised trade rather than opportunistic killings in Pakistan. They may also reflect improvements in law enforcement and reporting, as pre-2020 incidents in-country were far fewer (n = 4 illegal trade reports).

Analysis of poaching and trade levels of snow leopards in Pakistan indicates that annual losses are substantial, with retaliatory killings and trade identified as critical drivers. Although only a proportion of these cases are reported to law enforcement agencies (Din *et al.* 2022). These incidents have resulted in considerable economic losses for households due to livestock depredation, with some reporting the killing of up to two snow leopards per year in retaliation (Ibid).

Retaliatory killings can lead to the sale of snow leopard parts, feeding into IWT. In response, countries like Nepal have shifted their conservation strategies to focus more on conflict mitigation and community engagement, aiming to reduce HWC and prevent poaching (Joshi, 2024).

Figure 16 Top snow leopard parts and products in trade based on an estimated minimum snow leopard across ABC range States (three time periods 2000-2024)

Between 2000 and 2024, Kyrgyzstan recorded 25 incidents of illegal snow leopard trade (involving 29 snow leopards). In 2022, one case involving a snow leopard skin seized in the Chui region was reported to be en route to Kazakhstan. The absence of reported illegal trade incidents in Kazakhstan during the period under review may suggest potential intelligence gaps in monitoring cross-border trafficking routes.

Recent research (Shahid, 2023, Tokubek Uulu *et al.* 2024) highlights that snow leopard parts particularly bones, teeth, and claws remain present in Traditional Asian Medicine (TAM) markets, though much less frequently reported than tiger parts. This trade may serve as a substitute channel when tiger products are scarce or harder to obtain. In 2024, a live snow leopard cub was reportedly captured from its habitat in Gilgit-Baltistan and sold on the black market, although it was never recovered (police source, Dawn). While the current scale of the live snow leopard trade appears small, further monitoring is needed to assess the potential threat it poses to wild populations.

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Conservation Status and Global Trade Dynamics of Asian Big Cats

Snow leopard trade has historically been under-reported due to limited detection capacity and minimal enforcement across range countries. Over the past 25 years, China has seized most snow leopard skins in trade (65%, n = 197), with the remaining 35% recorded across six range States, as well as earlier cases in the United Arab Emirates in 2004. These figures likely underestimate the true scale of trade, highlighting the need for strengthened monitoring and enforcement efforts.

Several reported cases in China illustrate the type of criminality affecting snow leopards, revealing extensive networks with significant resources and access to markets. One recent case in particular is highlighted as it demonstrates the substantial threat these organised networks can pose to snow leopard populations.

Case study 4 Dismantling of a Major Wildlife Trafficking Syndicate in China (2020)[21]
Date Reported: 21 February 2020
Investigation Period: 2019–2020
Provinces Involved: Hunan, Fujian, Guangdong, Yunnan, Heilongjiang

Background
In early 2019, Chinese forestry police launched an investigation into a sophisticated wildlife trafficking syndicate operating across multiple provinces. The syndicate dealt in high-value wildlife commodities, including ivory, rhino horn, pangolin scales, and snow leopard products.

Law Enforcement Actions & Seizures
The investigation led to the arrest of 18 suspects in 2019 across several provinces and the seizure of over 1,200 endangered species items with a total estimated value of 26 million RMB (USD 3.7 million), including ivory and rhino horn (cups, carvings), Saiga antelope horns (over 900 seized).

Organised Crime Structure
The syndicate exemplifies the United Nations Convention against Transnational Organized Crime (UNTOC) definition of an "organised criminal group":

- **Structured group:** The syndicate was multi-tiered, with geographically specialised suppliers and centralised coordination by the main trafficker, existing over an extended period rather than forming spontaneously.
- **Objective:** Acting in concert to commit serious offences (illegal wildlife trafficking), the group sought to obtain direct financial benefit.
- **Continuity & coordination:** The group maintained operational continuity and division of labour sufficient to sustain large-scale trafficking across

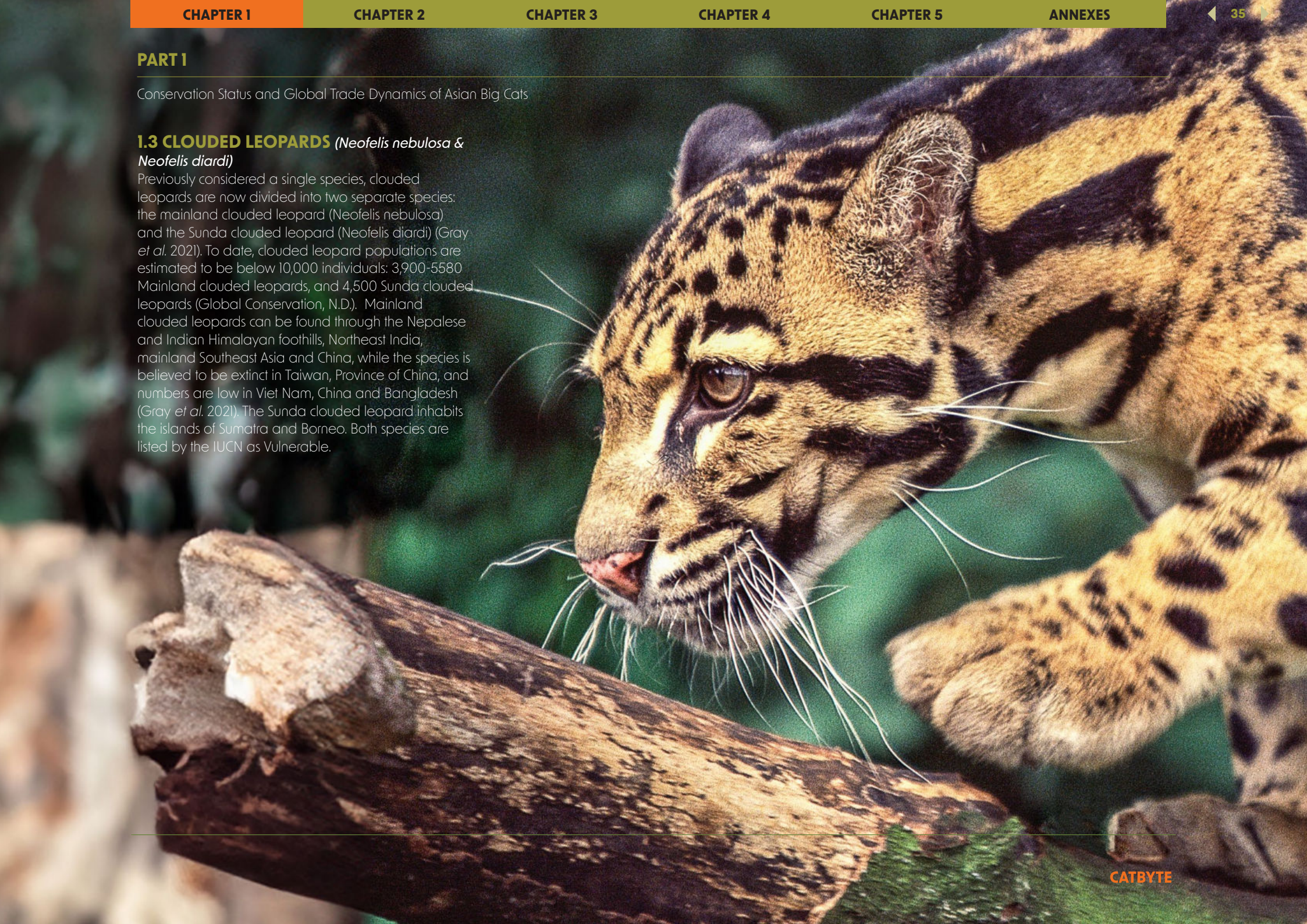
Methods Used

- **Digital platforms:** Buyers were connected through online trading platforms.
- **Logistics:** Commodities were concealed and shipped via express delivery services.
- **Financial flows:** Transactions were conducted through online banking, reducing traceability.
- **Concealment:** Wildlife products were disguised as Buddhist tiles.

Implications for Snow Leopard Conservation
Even though snow leopard items represented a small volume relative to other commodities, their trade has outsized conservation impacts due to the species' small population size.

1.3 CLOUDED LEOPARDS *(Neofelis nebulosa & Neofelis diardi)*

Previously considered a single species, clouded leopards are now divided into two separate species: the mainland clouded leopard (Neofelis nebulosa) and the Sunda clouded leopard (Neofelis diardi) (Gray *et al.* 2021). To date, clouded leopard populations are estimated to be below 10,000 individuals: 3,900-5580 Mainland clouded leopards, and 4,500 Sunda clouded leopards (Global Conservation, N.D.). Mainland clouded leopards can be found through the Nepalese and Indian Himalayan foothills, Northeast India, mainland Southeast Asia and China, while the species is believed to be extinct in Taiwan, Province of China, and numbers are low in Viet Nam, China and Bangladesh (Gray *et al.* 2021). The Sunda clouded leopard inhabits the islands of Sumatra and Borneo. Both species are listed by the IUCN as Vulnerable.

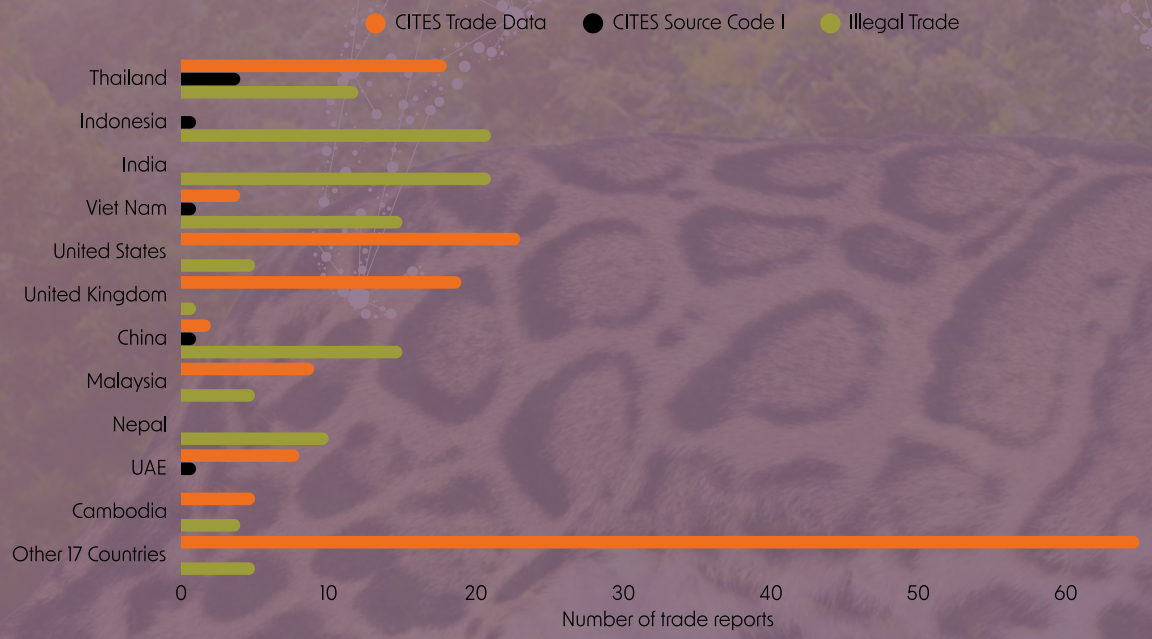


GLOBAL CLOUDED LEOPARD TRADE DYNAMICS

Between 2000 and 2024, an estimated 276 transactions of clouded leopard specimens (live, parts, and derivatives) were traded across 28 countries, combining both CITES trade data (n = 153), Source Code I (n = 8) and records of illegal activity (n = 115). Illegal trade is highly concentrated: just 11 countries account for 95% (n =109) of all illegal trade activity *(Figure 17)*.

Most trade records (CITES trade and illegal activity) concern live clouded leopards although most are attributed

Figure 17 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of clouded leopard specimens documented in trade by top countries (2000-2024)



22 CITES Trade Data may be lower for 2024 due to a delay in reporting

to CITES trade (93% / n = 174), whilst just 13 reports (7%) were from illicit trade.

Thailand (47), followed by the United Kingdom (21) and the United States (19) exported the highest number of live clouded leopards according to CITES trade data. There does not appear to be any decline in the trade of this commodity type. Seven live clouded leopards have been seized in Indonesia since 2000, of which six were seized in the most recent period.

Most trade reports recorded on CITES concern the mainland clouded leopard (98.7%) with the remaining two relating to the Sunda clouded leopard, when two shipments of specimens were exported from Malaysia to the US in 2014 and again in 2015. For illegal trade records, very little is known about the involvement of this species in trade.

Figure 18 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of clouded leopard specimens documented in trade by year (2000-2024) [22]

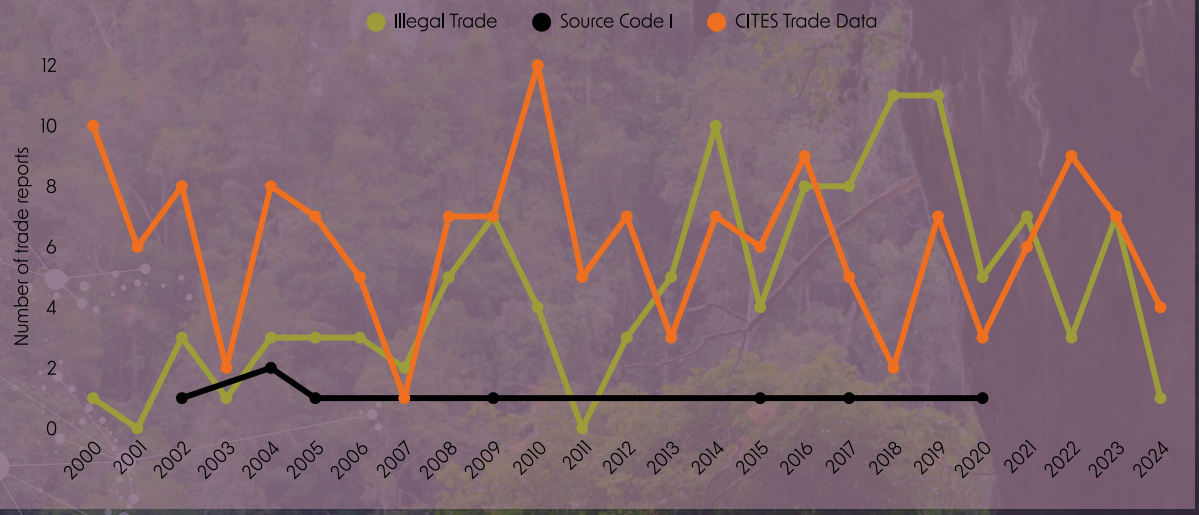
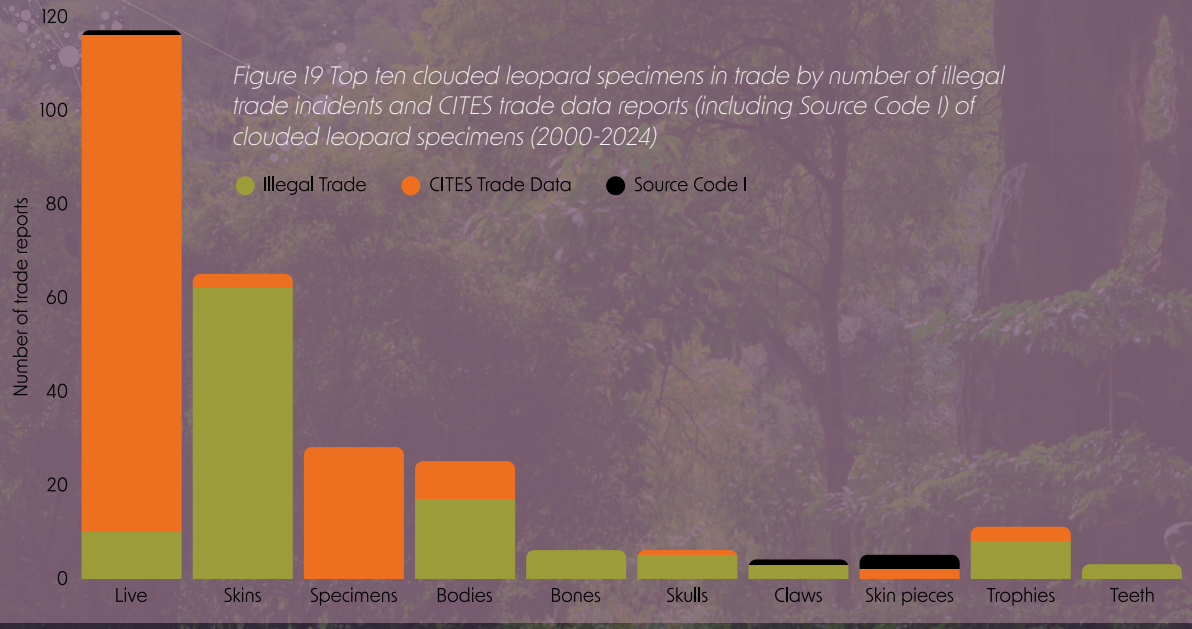


Figure 19 Top ten clouded leopard specimens in trade by number of illegal trade incidents and CITES trade data reports (including Source Code I) of clouded leopard specimens (2000-2024)



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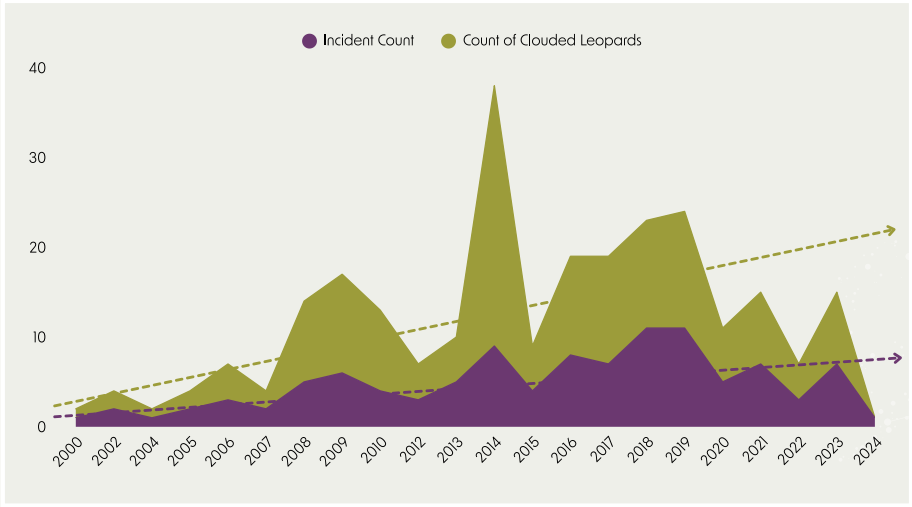
Conservation Status and Global Trade Dynamics of Asian Big Cats

ILLEGAL CLOUDED LEOPARD ACTIVITY ACROSS ABC RANGE STATES

In the longer-term the number of clouded leopard-related incidents (n=106 in total) and the estimated minimum number of clouded leopards in illegal trade both indicate an incline (ranging from a minimum count n=158 to maximum count n =178) *(Figure 20)*. The spike in 2014 is largely attributable to a seizure of 19 skins in Cambodia.

Figure 20 The number of incidents and estimated minimum number of clouded leopards documented in illegal trade (2000-2024)



The number of clouded leopards documented in illegal trade across the three time periods indicates the most recent (2017-2024) period points to a shift: Thailand, India, and Indonesia take prominence while activity in Cambodia and China decline *(Figure 21)*. Nepal and Viet Nam show steady levels, suggesting persistent but lower-volume illegal trade.

The seizure of skins has accounted for most of the clouded leopard commodities in illegal trade between 2000-2024 *(Figure 22)*. Since 2015, other commodity types including teeth, bones and claws, appear to have been documented in illegal trade. This may also be as a result of improved reporting practices.

Figure 21 The estimated minimum number of clouded leopards documented in illegal trade across three time periods (2000-2024) [23]

COUNTRY OF INCIDENT	EARLY	MIDDLE	RECENT	TOTAL
Cambodia		19	5	**24**
China	4	14	1	**19**
India	10	6	5	**31**
Indonesia	2	7	8	**17**
Lao PDR			1	**1**
Malaysia		1	2	**3**
Myanmar		3		**3**
Nepal	2	6	6	**14**
Thailand	2	5	15	**22**
Turkiye		3		**3**
Viet Nam	1	10	10	**21**
Total	**21**	**74**	**63**	**158**

DISCUSSION OF CLOUDED LEOPARD TRADE THREATS

Threats to clouded leopards mirror those faced by other ABC species such as primarily habitat loss and illegal trade. Deforestation, agricultural expansion, and infrastructure development have fragmented their habitats, increasing their vulnerability to HWC and other threats emerging from human activity. For instance, it is estimated that about 30% of the forest in the Sunda clouded leopard's range has been destroyed, mostly due to land conversion for palm oil plantations (Global Conservation, N.D.). Large-scale infrastructure projects currently underway in Borneo and Sumatra are expected to further fragment key habitats for this species (Kaszta *et al.* 2024).

[23] Early period (2000-2008), Middle (2009-2016) and Recent period (2017-2024)

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As forests are fragmented and reduced, clouded leopards are forced into smaller, isolated areas, heightening the likelihood of HWC and exposure to poaching. Research highlights that protecting remaining forest patches, improving habitat connectivity, and engaging local communities are critical measures for mitigating these risks. Long-term monitoring and data-driven conservation strategies are essential to ensure the persistence of clouded leopard populations in the face of ongoing environmental pressures (Abedim *et al.* 2024).

As clouded leopard parts continue to be recorded in seizures and trade records, it is suspected that their extraction from the wild through targeted poaching or accidental captures is a significant driver of population declines (Gray et al. 2021). In the longer-term illegal trade has been observed in clouded leopards for skins, bones, meat, and live animals for the exotic pet market, with records showing hundreds of these products being traded in Asia (D'Cruze & Macdonald, 2015). Surveys in Myanmar identified clouded leopards as the most frequently traded big cat in the country (Ibid.). In 2021, a Myanmar national was found in possession of a clouded leopard skin and bones in the Phop Phra District in Thailand, close to the Myanmar border (Anon. 2021). If poaching and habitat loss continue, mainland clouded leopards are expected to have declined more than 30% between 1999 and 2019 in Myanmar, Cambodia, Lao PDR, Viet Nam, Bangladesh, and China (Gray et al. 2021).

Figure 22 Top clouded leopard parts and products in trade based on an estimated minimum clouded leopard across ABC range States (three time periods 2000-2024)

A 2021 study (Gomez & Shepherd, 2021) uncovered illegal trade in Sunda clouded leopards and Javan leopards in Indonesia. Between 2011 and 2019, seizures involved at least 83 individuals (32 Sunda clouded leopards and 51 Javan leopards), including live animals and body parts. Indonesia acted as both source and, occasionally, destination, with shipments documented to Russia, Kuwait, and the United Kingdom. Notably, clouded leopards were sometimes trafficked as substitutes or supplements for tiger parts, with over 40% of clouded leopard seizures (n = 17 of 39) included tiger teeth (Ibid.).

Case study 5 Outcomes in Sunda Clouded Leopard Prosecutions, Indonesia (2011–2019)

Between 2011 and 2019, at least 41 incidents involving clouded leopard trade were recorded in Indonesia. Of these, around 20 cases progressed to successful prosecutions, implicating 29 suspects. While this reflects some level of law enforcement follow-through, the quality of judicial outcomes raises concerns on deterrence (Gomez & Shepherd, 2021).

Key Findings

- **Penalties far below maximums:** Indonesian law provides for up to five years' imprisonment and IDR 100 million (USD 6,700) in fines for protected species crimes. The harshest sentence observed in this period was two years and IDR 50 million (USD 3,300), with most offenders receiving substantially lighter punishments.
- **Multi-species trafficking**: Many prosecutions grouped clouded leopard parts with tiger skins, orangutans and other protected species, highlighting the role of syndicates trading across taxa. This context underscores the networked nature of wildlife crime, but also makes it difficult to assess the specific impact of Sunda clouded leopard exploitation.
- **Commodity diversity:** Seized products included skins, skulls, teeth, claws, and live cubs, showing that both the parts trade and the live-pet market reach the courts. This suggests that their trade is often embedded within broader multi-species trafficking networks rather than being targeted in isolation. Although seizures have increased, outcomes in court have been inconsistent.

Implications

The research illustrates a deterrence gap: a roughly 50% prosecution follow-through rate, combined with below maximum sentencing, meaning offenders face low expected costs relative to profits. Improved court data recording via Indonesia's Case Tracking Information System (Sistem Informasi Penelusuran Perkara) would allow for better monitoring of trends and outcomes, supporting intelligence-led enforcement.

It is also important to note that monitoring and investigative efforts have primarily targeted priority species such as tigers, rhinos, and elephants, potentially constraining the detection of illegal trade incidents involving clouded leopards.

1.4 LEOPARD *(Panthera pardus)*

Leopards have a wide historic distribution across Africa and Asia. In recent years, their populations across Asia have seen significant declines and fragmentations, with localised extinctions reported throughout their range. These declines have been linked to a combination of pressures, including HWC, habitat fragmentation, prey depletion, the excessive use of their skins in ceremonies and trophy hunting, and IWT (Stein, 2025).

While the species as a whole is listed as Vulnerable by the IUCN, the assessment of Asian subspecies status is more susceptible. Three subspecies are classified as Critically Endangered: the Amur leopard (P. p. orientalis), with estimated 130 individuals in Russian Federation and 174-348 in North China; the Indochinese leopard (P. p. delacouri), with 77–766 mature individuals; and the Arabian leopard (P. p. nimr), with just 70–84 individuals remaining. Two additional subspecies are considered Endangered: the Javan leopard (P. p. melas), with an estimated 319 mature individuals, and the Caucasian leopard (P. p. tulliana), with a population between 750–1,044. The Sri Lankan leopard (P. p. kotiya) is classified as Vulnerable, while the Indian leopard (P. p. fusca) is listed as Near Threatened. Despite a current estimated population of over 15,000 individuals, data on population trends for the Indian leopard remains limited.

In Southeast Asia, leopards are thought to have disappeared from most of their former range, including Cambodia, southern China, Lao PDR, and Viet Nam. Viet Nam has reported an 80% population decline over the past three decades, citing poaching and habitat loss as key drivers. This reflects broader trends across Asia, where leopards continue to be impacted by both direct exploitation and indirect pressures. The cumulative impact of these threats is of concern given the decline in leopard populations in Asia. Recent investigations warn that the continuing trade in leopard parts risks accelerating this decline, potentially pushing several subspecies toward extinction (EIA, 2020 a).

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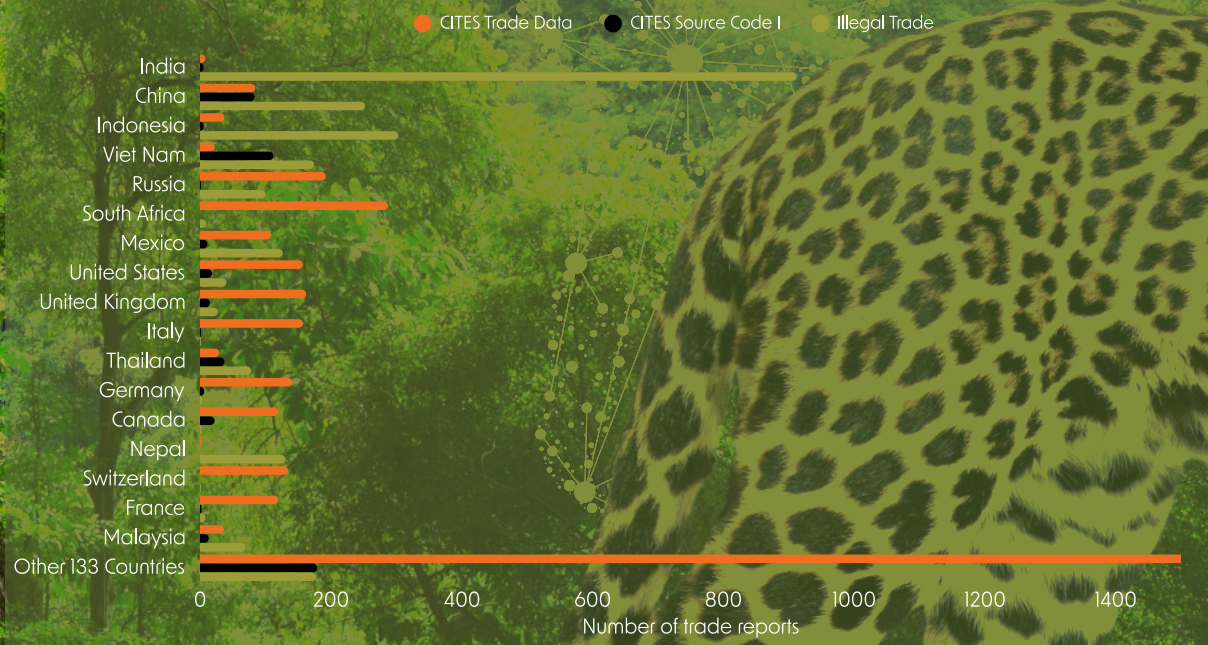
Conservation Status and Global Trade Dynamics of Asian Big Cats

REGIONAL LEOPARD TRADE DYNAMICS

Between 2000 and 2024, an estimated 2,083 transactions of leopard specimens (including live animals, parts, and derivatives) were traded across 38 Asian countries and territories. These records combine data from CITES trade data (n = 482), CITES Source Code I confiscations (n = 195), and open-source records of illegal activity (n = 1,406) *(Figure 23)*.

China has reported the highest number of CITES trade records under Source Code I, these mainly concern leopard derivatives and medicinal

Figure 23 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of leopard specimens documented in trade by top countries (2000-2024)



[24] CITES Trade Data may be lower for 2024 due to a delay in reporting

products however most of these cases predate 2011.

Over the past 25 years the number of reports of leopard seizures and poaching incidents have increased, peaking in 2020 ***(Figure 24)***. This trend may reflect factors such as enhanced data collection, increased law enforcement activity and is explored more in the next section. In comparison, CITES trade data has remained stable during the same time period.

Overall, most leopard trade relates to the skin trade, which mostly derives from illegal trade whilst the movement of live leopards is attributed to CITES trade ***(Figure 25)***.

Figure 24 Number of illegal trade incidents and CITES trade data reports (including Source Code I) of leopard specimens documented in trade by year (2000-2024) [24]

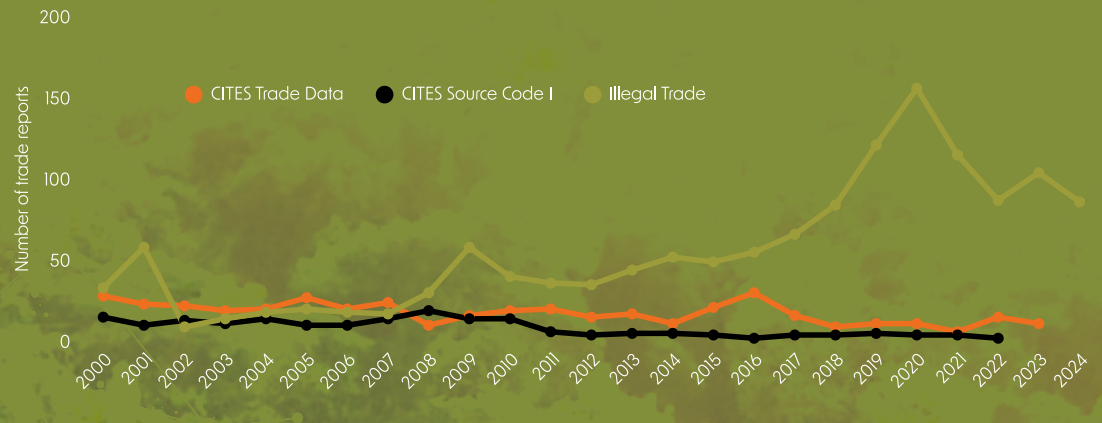
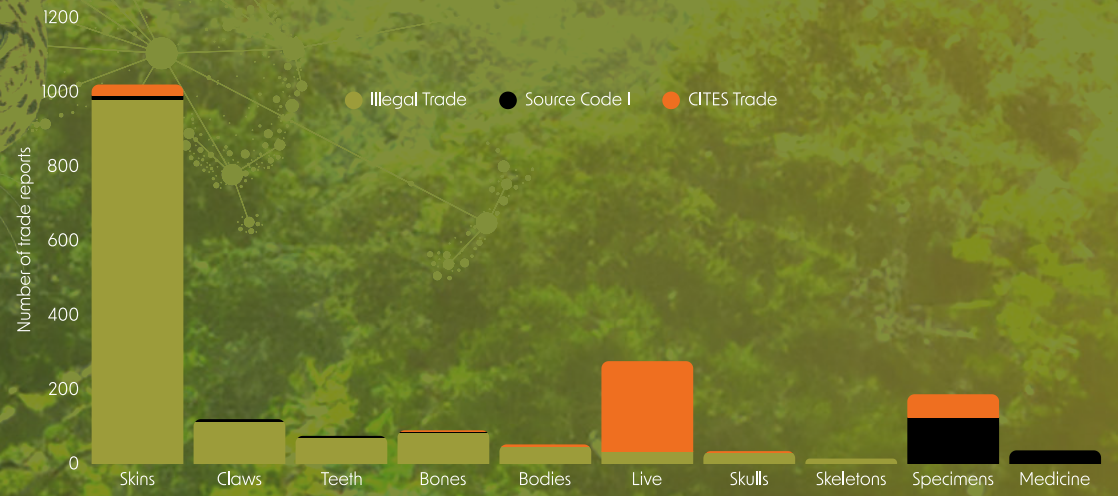


Figure 25 Top ten leopard specimens in trade by number of illegal trade incidents and CITES trade data reports (including Source Code I) of leopard specimens (2000-2024)



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Conservation Status and Global Trade Dynamics of Asian Big Cats

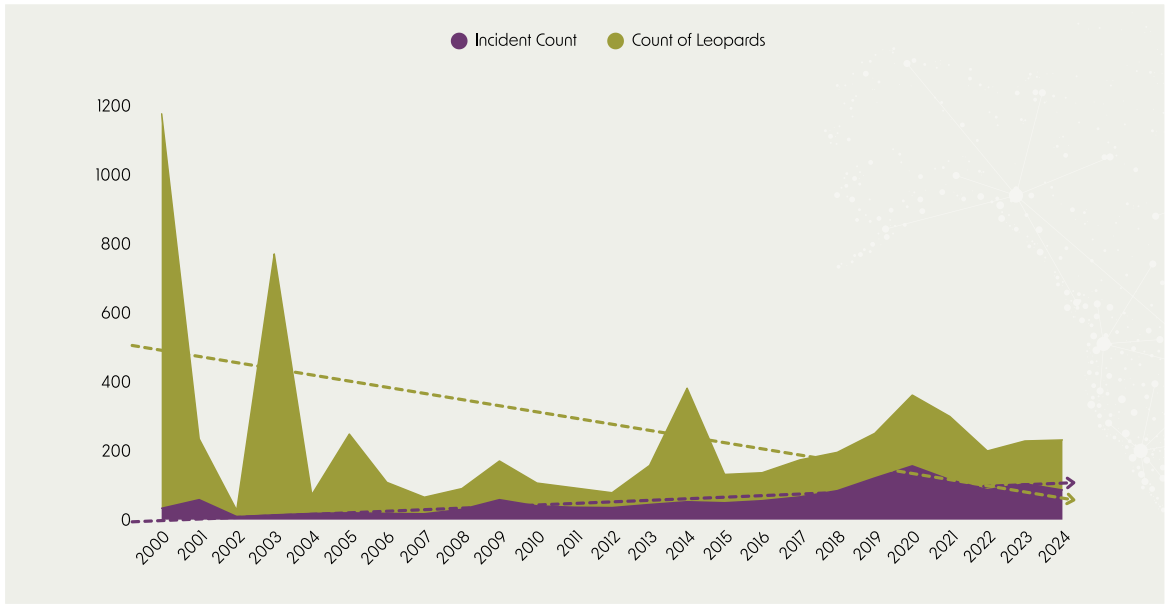
ILLEGAL LEOPARD TRADE ACTIVITY ACROSS ABC RANGE STATES

In the longer term, the number of leopard-related poaching and seizure incidents (n = 1,406 in total) has increased, while the number of individual leopards in trade shows a declining trend (ranging from a minimum count: 4,571 to a maximum count: 5,075) *(Figure 26)*. This pattern is partly influenced by a major seizure involving 18,000 leopard claws in 2000.

The highest number of leopard-related illegal trade incidents in the past 25 years was recorded in 2020, when incidents rose by 29% (n = 35) compared to 2019. Increases that year were particularly apparent in several ABC range States, including India, Nepal, and Sri Lanka.

The number of leopards documented in poaching and seizure incidents across the three time periods shows a returning increase during the most recent period recording higher numbers than the previous one (Figure 27). This rise is largely driven by an increase of illegal trade incidents in India, which have climbed steadily from 167 in the early period, to 192 in the middle period, and 622 in the most recent period (2017-2024).

Figure 26 The number of incidents and estimated minimum number of leopards documented in illegal trade (2000-2024)



Marked decreases are evident for China, which accounted for over one quarter of leopards seized in the early period (26% / n = 705), but just 3% (n = 32) of the total in the most recent period.

In contrast, Sri Lanka recorded increases in the number of leopards documented in illegal trade, with most activity linked to poaching during 2020. Several incidents involved leopard carcasses found with parts of their bodies removed.

The pattern of leopard commodities in trade indicates a decline in the volume of leopard skins seized since 2016 (Figure 28), as other leopard commodities seized in illegal trade are reflected more frequently than earlier years. Claws, bones and live individuals feature more often in the past ten years.

DISCUSSION OF LEOPARD TRADE THREATS

Leopards face a severe threat from illegal trade in Asia, where nearly all (94%) of their global illegal trade occurs within ABC range States. In several countries, leopard parts are trafficked at rates comparable to those of tigers (Stein, 2025). Following China's 1993 ban on the tiger bone trade, leopards became an official substitute in traditional Chinese medicine (EIA, 2020 a). Skins, bones, claws, and other leopard products have continued to

[24] Early period (2000-2008), Middle (2009-2016) and Recent period (2017-2024)

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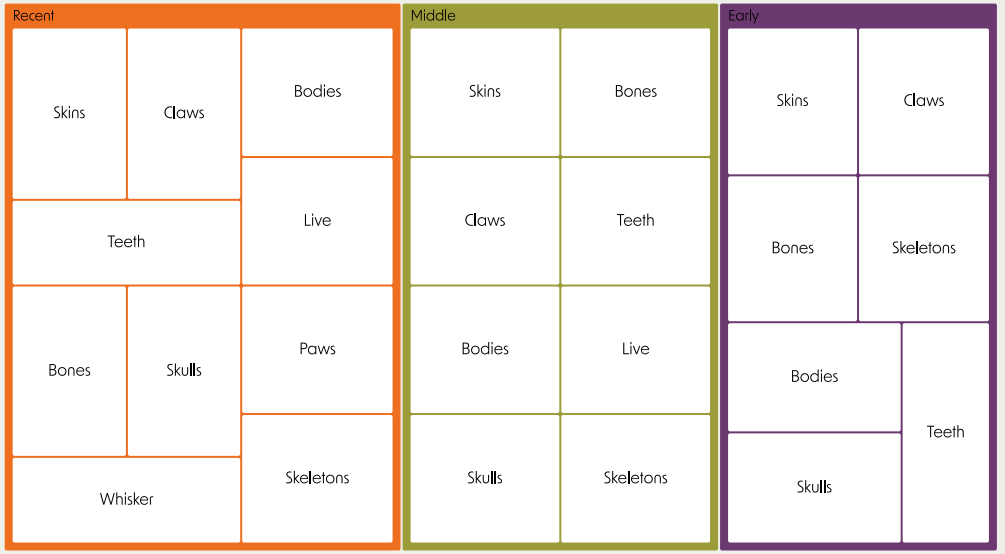
Figure 27 The estimated minimum number of leopards documented in illegal trade across three time periods [24] (2000-2024)

COUNTRY OF INCIDENT	EARLY	MIDDLE	RECENT	TOTAL
Armenia		1		**1**
Bangladesh			6	**6**
Bhutan	7	1		**8**
Cambodia		3	2	**5**
China	705	71	32	**808**
Georgia			1	1
India	1641	397	819	2857
Indonesia		11	8	**19**
Iran			9	**9**
Malaysia	1	6	4	**11**
Myanmar		4		**4**
Nepal	213	91	78	**382**
Oman		1		**1**
Pakistan		2	36	**38**
Russian Federation	1	6	6	**13**
Saudi Arabia			1	**1**
Sri Lanka		3	22	**25**
Thailand	4	23	29	**56**
Turkiye		252		**252**
Turkmenistan			1	**1**
United Arab Emirates	1			**1**
Viet Nam		10	60	**70**
Yemen			2	**2**
Total	**2573**	**882**	**1116**	**4571**

Figure 29 Proportional composition of leopard parts and products in trade based on estimated minimum number of leopards (2000–2024)



circulate in both legal and illegal markets (EIA, 2023), valued both for medicinal purposes and for their symbolic or status significance(TRAFFIC, N.D.).

Improved reporting may be revealing more about the trade dynamics in leopard range states such as Georgia, Iran, Sri Lanka and the UAE. In the most recent period (2017–2024), several seizure incidents involving leopard skins were recorded, whereas previously this type of trade had gone unreported or was less of a concern.

Analysis collated in CatByte shows that convergence between the leopard and tiger trades is the most frequent among all big cats and is most common for skins, followed by claws and bones. This overlap raises particular concerns for law enforcement, as leopard claws, teeth and bones may be deliberately passed off as tiger parts or misidentified due to limited forensic testing capacity.

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Conservation Status and Global Trade Dynamics of Asian Big Cats

Patterns of seized commodities illustrate this convergence. While skins accounted for most seizures in the earlier period, leopard bones have been intercepted more frequently in recent years *(Figure 28)*. Although most seized bones analysed in this report are reported as tiger, species misidentification remains a significant risk: few specimens undergo DNA testing, leaving open the possibility that leopard parts are either overlooked or deliberately laundered into tiger markets (Wong & Krishnasamy, 2019).

These risks are reflected in enforcement operations, where leopard trafficking often overlaps with other illicit trades or crosses international borders. Recent enforcement operations demonstrate that leopard trafficking does intersect with other illicit trades, such as narcotics, and frequently involves cross-border movement. These examples illustrate how traffickers exploit shared smuggling routes and networks, highlighting the complexity of the trade.

Leopard trade - drug convergence in Nepal

1. 2020: A leopard skin and 4kg of opium were seized from two youths in the Dang district, near the Indian border. Both suspects were prosecuted for possession of drugs and wildlife skins. [26]

2. 2023: Three individuals, including a police constable, were arrested for possession of a leopard skin and 6.74kg of hashish. The operation involved a collaborative effort from several police departments.[27]

Cross-border leopard trade - Myanmar and Thailand

3. In 2022, Thailand's Natural Resources and Environment Crime Division, (NRECD) a specialised unit within the Royal Thai Police arrested three suspects (two Thai and one Myanmar national). Acting on intelligence that villagers in Myanmar were poaching wildlife to supply a wealthy buyer, an undercover officer arranged a buy. The seizure included three live leopard cubs, two leopard skins, three clouded leopard skins, and one tiger skin. The suspects were charged with possession of protected wildlife and carcasses without approval. With strong suspicions that the specimens had been smuggled from Myanmar, the case demonstrates the transnational dimension of leopard trafficking networks.

[26] https://www.setopati.com/social/221268
[27] https://cannabislaw.report/nepal-police-constable-two-others-arrested-with-leopard-skin-and-hashish/
[28] https://asianews.network/two-thais-myanmar-man-arrested-for-alleged-poaching/

PART 1

Conservation Status and Global Trade Dynamics of Asian Big Cats

CATBYTE

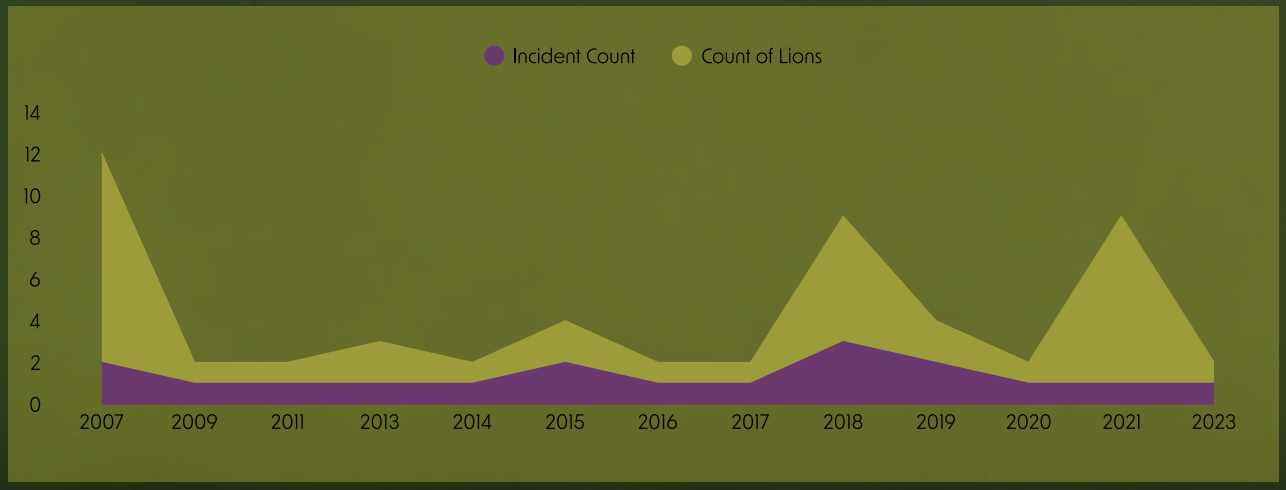
1.5 LION *(Panthera leo)*

Once widely distributed across Asia and Africa, lion populations have been extirpated from much of their historic range, now estimated to be only 7% of what it once was (Nicholson *et al.* 2023). The Asiatic lion, long regarded as a distinct subspecies (*Panthera leo persica*), is no longer recognised as taxonomically separate by the IUCN SSC Cat Specialist Group, which subsumed it under *P. l. leo* alongside North African populations (Kitchener *et al.* 2017). It currently survives as a single, isolated population in and around the Gir Forest National Park in Gujarat, western India. With populations reduced to 284 individuals in 1990, conservation efforts by the Indian government have contributed to an increase in numbers, with 891 individuals observed in 2025 (IBCA, 2025a). Reduced poaching and enhanced habitat protection are considered the primary drivers of this recovery (IBCA, 2024). Today, the Asiatic lion sub-population is believed to be thriving and expanding beyond the Gir Forest, with a habitat limited to 6,600 sq km in 1990 expanding to 35,000 sq km in 2025 (IBCA, 2025 a). However, the species remains classified as Endangered due to its restricted range and susceptibility to stochastic events such as disease outbreaks or wildfires (ZSL, n.d.; Breitenmoser *et al.* 2008).

ILLEGAL LION TRADE ACTIVITY ACROSS ABC RANGE STATES

In respect of the methodology developed to minimise the over-inflation of the Asian population of lions in illegal trade, only seizure incidents that explicitly stated the specimens were assessed to originate from the Asian population of lions was included (Figure 29). In total, between 2000-2024, 18 incidents were reported, most occurred in India (17), and one in China (2015) and relates to an estimated minimum of 37 lions.

Figure 29 The estimated minimum number of lions documented and the number of illegal trade incidents (2000-2024)



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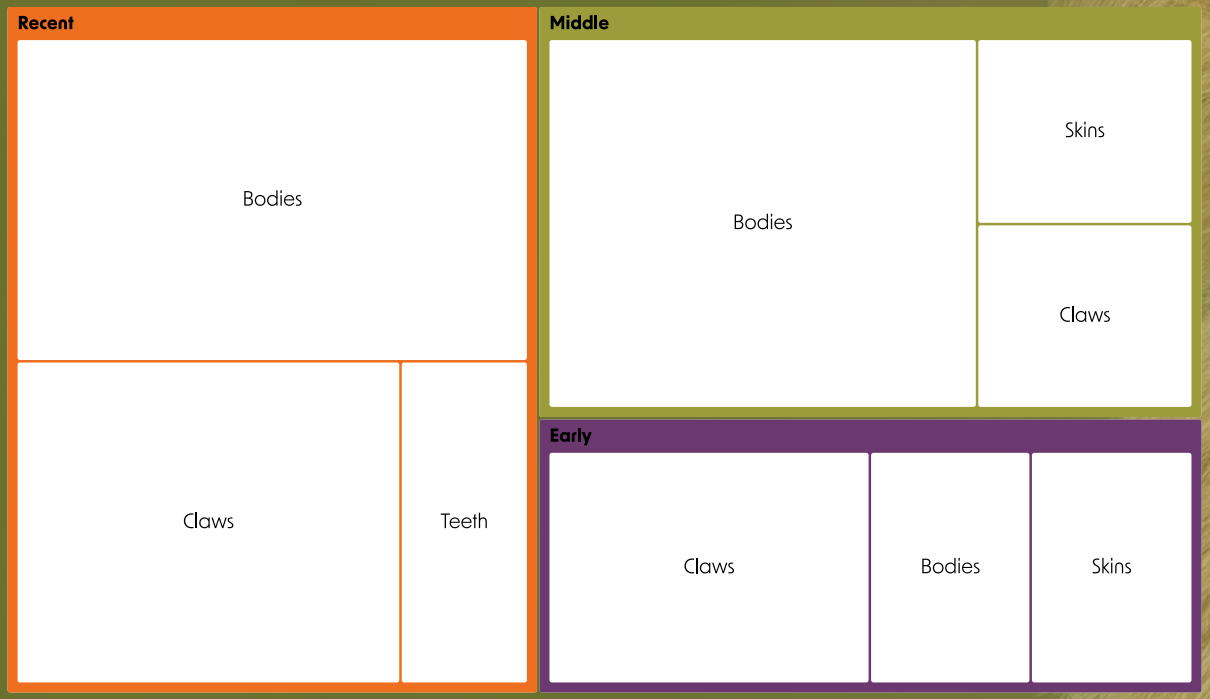

Figure 30 Lion parts and products in trade based on estimated minimum number of lions (2000–2024)

Figure 29 The estimated minimum number of lions documented and the number of illegal trade incidents (2000-2024)

Most incidents have been reported in the recent period (2017–2024), with several seizures involving smaller body parts such as claws and teeth (Figure 30). However, the limited number of incidents makes it difficult to draw any meaningful patterns or conclusions.

ILLEGAL LION TRADE DISCUSSION

While direct evidence of current trade threats to Asian populations of lions is limited, the broader context of lion trade, particularly involving African populations, offers important insights. The Panthera leo species as a whole has experienced significant pressure from trade in bones and other body parts, driven largely by demand from traditional medicine markets in both Asia and Africa, although habitat fragmentation, loss of prey, and human-lion conflict remain the primary drivers of lion decline. This trade includes skins, claws, teeth, bones, tails, and even internal organs, which are used for spiritual and medicinal purposes (Williams et al. 2017). Expert surveys indicate that domestic African demand for lion body parts is widespread and currently perceived as a more immediate threat to wild populations than international trade (Williams et al. 2017a). At the same time, legal and illegal exports of lion bones from Africa to East and Southeast Asia, particularly from South Africa, have increased in recent years, highlighting the continued influence of international demand (Williams et al. 2017b). Wild African lion populations have declined from approximately 200,000 individuals to around 25,000, raising concerns about the impact of trade on population sustainability (Wesloh, 2020). This demand has contributed to significant poaching in African range States, including Mozambique and South Africa, where both wild and captive lions have been recorded in the trade (Everatt et al. 2019; Mole & Newton, 2020).

The risks are further underlined by evidence of transnational organised crime (TOC) involvement in the illegal lion bone trade from Africa to Asia. An investigation by the Organised Crime and Corruption Reporting Project (Sharife, 2022), which reviewed CITES trade data from 2016–2019, found that almost 50% of exported lion bones from South Africa were reportedly destined for Lao PDR. However, customs records indicate that none of these shipments entered Lao PDR; instead, they were purchased by shell companies linked to Laotian-based TOC networks and re-routed across the border into Viet Nam.

At least one captive hunting facility in South Africa was reportedly owned and operated by a group of Vietnamese businesspeople who bred both lions and tigers on site. The facility catered to hunters from Europe, the United States, and Asia, and after hunts, the operators were alleged to collect the carcasses and sell the bones to Vietnamese buyers. In some cases, lion bones were mislabelled as 'tiger' to increase their value, thereby converting 'legal' lion bone exports into an illegal product (Lam *et al.* 2020). Such criminal networks demonstrate the logistical infrastructure and adaptability to pivot between species and products in response to market opportunities.

Consumer research conducted in China and Viet Nam between 2017 and 2020 highlights important nuances in demand dynamics. While tiger bone wine remains the dominant choice, accounting for approximately 82% of consumer responses, lion bone wine represented 18% (Coals *et al.* 2020). A notable generational divide emerged: younger consumers in China demonstrated a higher stated preference for lion bone wine compared to older age groups (Macleod *et al.* 2019; ENV, 2020). Although overall preferences still strongly favour tiger products, these findings suggest that substitution patterns are not fixed. If generational tastes continue to evolve, demand could shift increasingly toward lions, with potentially serious consequences for Asiatic lion populations, given their small size and restricted range. There is a perception that international trade in lions is well controlled and that imported lion products are likely legal. In practice, however, there appears to be little to no market in China for products explicitly labelled as "lion," and many lion products are reportedly relabelled as "tiger" to meet consumer demand (CITES, 2022).

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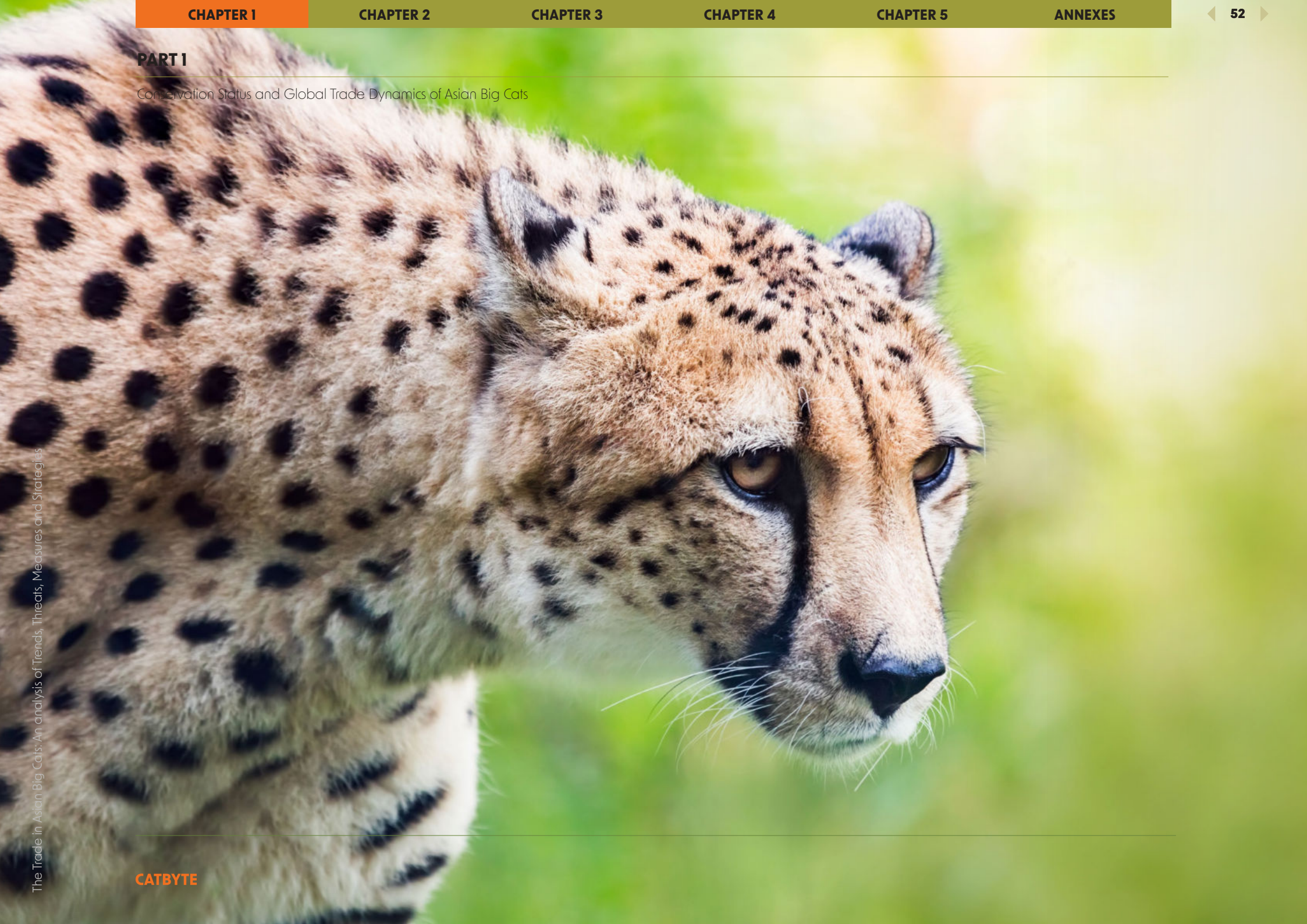


1.6 CHEETAH *(Acinonyx jubatus)*

Once ranging across southwest and central Asia to India, the Asiatic cheetah has disappeared from nearly all of its historic range and now exists only in Iran (Jowkar *et al.* 2008), mainly in the Touran Biosphere Reserve. This critically endangered subspecies represents the last remaining population of cheetahs in Asia and is estimated to consist of 30-40 individuals (IUCN, 2023).

India's African cheetah reintroduction, launched in 2022 under Project Cheetah, aims to restore the species after its extinction in the country over 70 years ago. Beginning with the translocation of eight African cheetahs from Namibia to Kuno National Park, and later supplemented by individuals from South Africa, the program seeks to establish a self-sustaining population. While the primary focus is ecological restoration, the initiative is also significant from a trade perspective, as the historical capture and trade of live specimens were key drivers of cheetah decline in Asia. The program's success will depend on effective habitat and prey management, managing competition with other predators such as leopards, and mitigating the continued risks associated with illegal trade demand.

Although Iran's Asiatic cheetah population has not been directly confirmed as a target of international trafficking, illegal trade continues to pose a significant threat, particularly through the trafficking of African cheetahs. Between 2010 and 2019, an estimated 4,184 cheetahs were involved in over 1,800 documented trade incidents across the Horn of Africa and Gulf States (Tricorache *et al.* 2021), where private ownership of cheetahs and other big cats is widespread. These trade dynamics indirectly endanger both the remnant Asiatic cheetah population in Iran and the reintroduced population in India, as persistent market demand in regions close to their historic range risks creating spillover pressure.

ILLEGAL ACTIVITY ACROSS ABC RANGE STATES

Assessing the illegal trade of Asiatic cheetahs is challenging without inadvertently including African individuals, which can distort the analysis. For this reason, this review considers only incidents in Iran where the cheetah is explicitly identified as being of Asian origin. Using this approach, three incidents were identified, all involving the seizure of cheetah cubs in Iran. The most recent incident was reported in 2021.

While most cheetahs currently in trade are of African origin, any resurgence in their commercial value could reinforce consumer expectations and erode conservation gains in Asia. The fate of the Asiatic cheetah in Iran is therefore closely tied to global efforts to reduce demand and strengthen cooperation under the CITES framework.

PART 2:
OVERVIEW OF ILLEGAL TRADE IN ABCS ACROSS RANGE STATES (2000–2024)

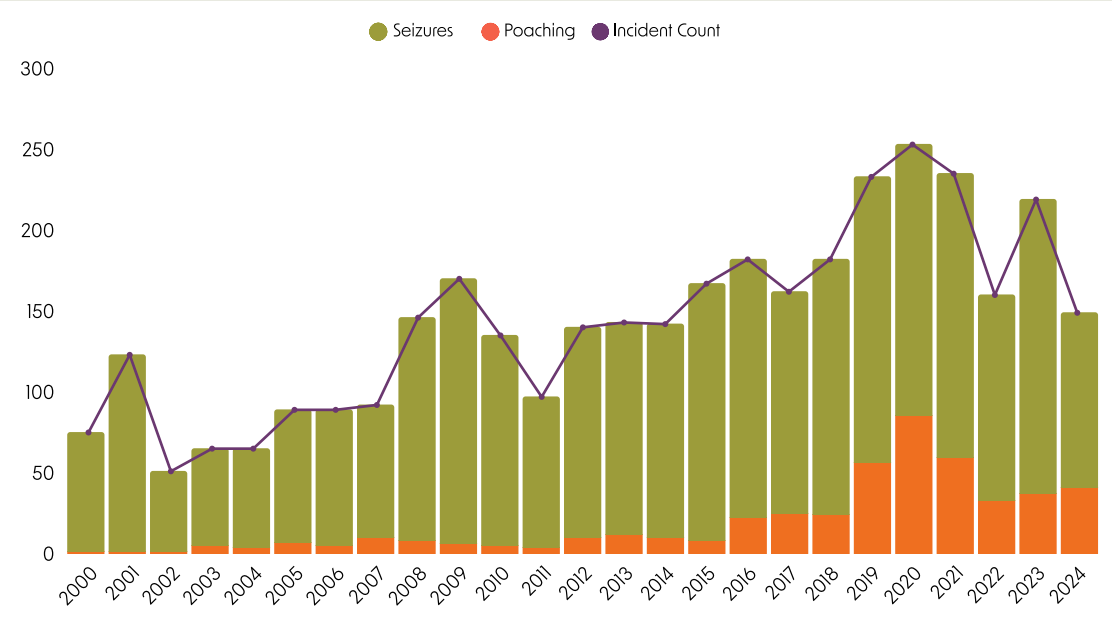
Analysis of 3,564 reported incidents of poaching and illegal trade in ABCs between 2000 - 2024 reveals a long-term upward trend (Figure 31). This may be due to several reasons, including improvements in data capture, reporting mechanisms and law enforcement efforts, and not necessarily an increase in crime. Further insights about trade volumes may illuminate this.

PART 2

Overview of Illegal Trade in ABCs Across Range States (2000–2024)

Incidents peaked in 2020, accounting for 7% (n = 253) of all reported cases during the period under review. On average, 142 incidents are reported annually. However, since 2019, there has been a marked increase above this average particularly between 2019-2021 and again in 2023. Together, these four years disproportionally account for 26% (n = 940) of all reported incidents since 2000. Incidents for 2024 (n = 149) may appear lower due to delayed reporting and continued monitoring is recommended to determine whether this upward trend persists.

Figure 31 Number of incidents by type across 33 ABC range States (2000-2024)



PART 2

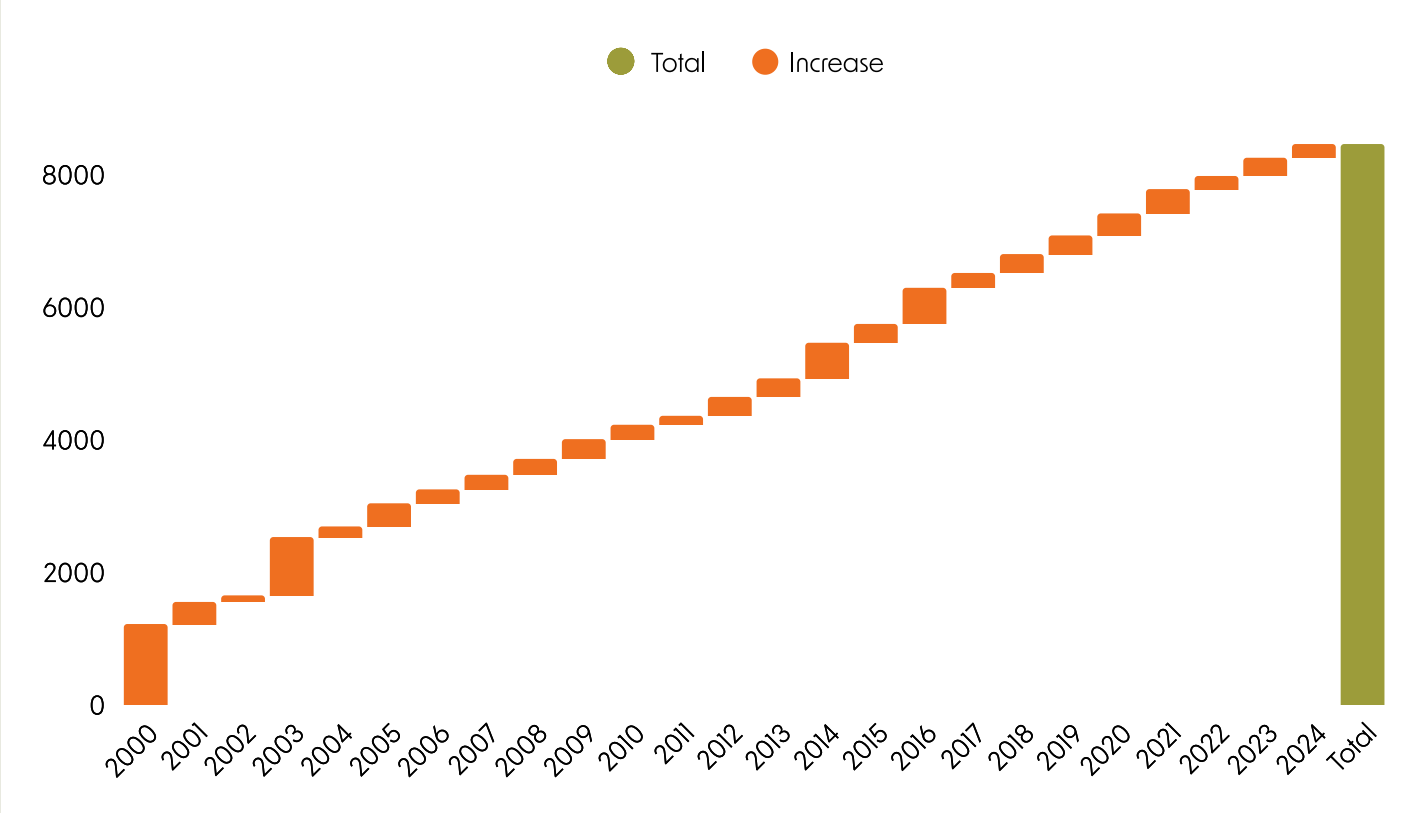
Overview of Illegal Trade in ABCs Across Range States (2000–2024)

Figure 32 shows the estimated number of ABCs seized (ranging from a minimum count n = 8,468 to a maximum count n = 10,169), working with the minimum count the annual number of big cats seized has declined over time. This contrasts with the number of illegal trade incidents, which show an increase (Figure 32), indicating a potential shift from large-volume consignments in earlier years to more frequent but smaller-scale seizures in recent years.

In the longer term, most illegal trade concerns leopards (accounting for 54%), followed by tigers (39%), snow leopards (5%), clouded leopards (2%) while cheetahs and the Asian population of lions both account for less than 1%. Figure 33 shows the proportion across three time periods. The early period (2000-2008) points to the high proportion that leopards account for (69%), with tigers the second highest proportion, accounting for 25%. Although the proportion that leopards accounted for during the middle period (2009-2016) declined, it again accounts for most of the big cats found in trade during the most recent period (2017-2024).

Across the 33 range States, the distribution of incidents and the numbers of ABCs found in trade reflect both expected patterns and notable disparities, as discussed

Figure 32 Cumulative count of Asian big cats found in illegal trade (2000–2024)



[28] Early period (2000-2008), Middle (2009-2016) and Recent period (2017-2024)

PART 2

Overview of Illegal Trade in ABCs Across Range States (2000–2024)

in the species-specific sections. Focusing on the countries with the highest number of incidents, just eight countries India, China, Nepal, Thailand, Indonesia, Viet Nam, Russia and Malaysia account for 93% (n = 7,850) of the total number of ABCs documented in illegal trade. Turkiye recorded a comparatively high volume of big cats in trade (n = 258), though these were linked to only two seizures (2014 and 2024). While monitoring is advisable, this does not yet appear to represent a consistent pattern and therefore Turkiye was excluded from this list of countries of concern. These eight range States have consistently appeared in incident analyses over the 25-year period, underscoring their central role in the illegal trade of ABC *(Figure 34)*.

Between 2000 and 2024, India has consistently reported the highest number of incidents for ABCs especially after 2005 (Wong & Krishnasamy, 2019). China initially featured most prominently, but saw a sharp decline in its share, suggesting changes in enforcement, trade levels, data reporting and population declines. More recent years show a growing role for Viet Nam and Thailand.

Figure 33 Proportional composition of big cat parts and products in trade based on estimated minimum number of individuals across three time periods [28] (2000–2024)

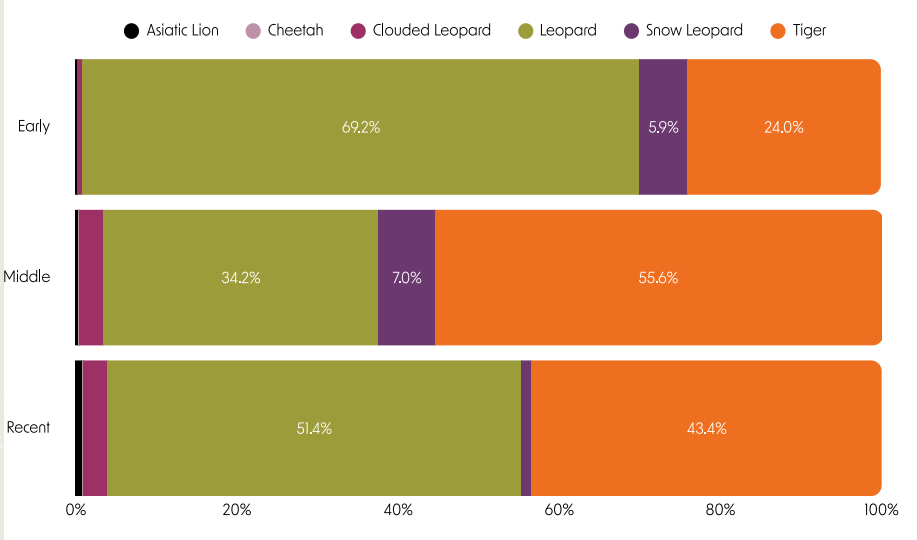
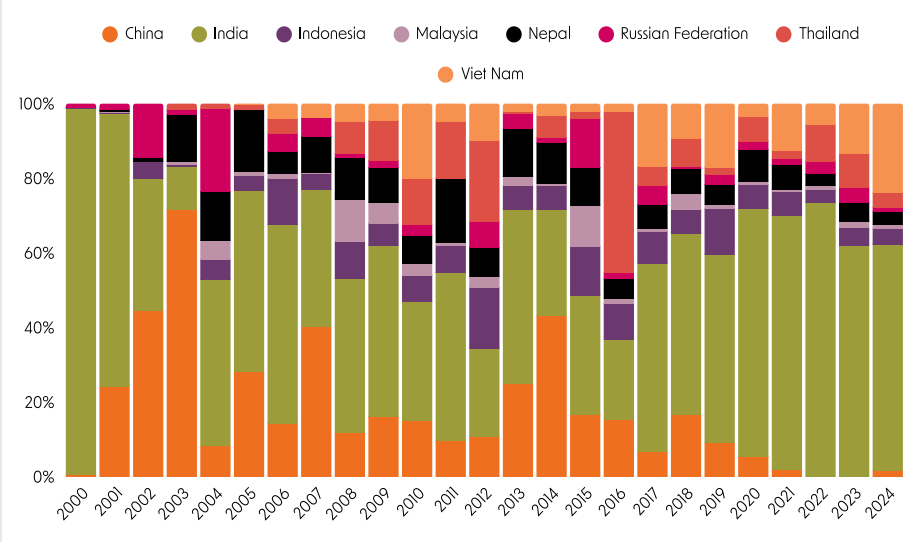


Figure 34 Proportional share of big cats in trade across eight key ABC range States (2000-2024)



1.7 EMERGING TRADE THREATS ACROSS ALL ABCS

THE EXOTIC PET TRADE

The exotic pet trade poses a systemic threat to big cat conservation, both through direct demand for live cubs and by fuelling the trafficking infrastructure that supports broader wildlife crime. Criminal networks rarely specialise in a single species; the same routes, concealment methods, and corrupt facilitators are used to move tiger cubs, leopard cubs, lions, cheetahs, and other exotic animals. Although these overlaps are inferred from trafficking patterns, they are not always directly apparent from seizure records. This convergence may enable the laundering of protected species, complicate enforcement, and normalises the private ownership of exotic potentially wild animals, undermining conservation efforts and increasing the likelihood that illegal trade will be concealed within legal or captive markets.

Enforcement cases across Asia highlight these dynamics and also point to a relationship between the emerging trade in big cats as exotic pets and captive breeding practices.

In Pakistan, a snow leopard cub was sold into IWT after being poached from Nazabar Nullah in the Yasen Valley of Ghizer District, Gilgit-Baltistan, in 2024 (Nagri, 2024). That same year, incidents were reported involving both a lion and a leopard being kept on residential properties, with the lion linked to an illegal breeding facility (Mehmood, 2024). As of 2025, Punjab province alone reportedly houses 582 big cats in private ownership, mostly lions and tigers, some of which are offered for sale online or in local markets (Pers. comms. Uzma Khan, WWF Pakistan). Wildlife laws in Punjab permit the breeding of big cats for commercial and entertainment purposes (CITES, 2022). These legal frameworks may create opportunities for domestic sales and potential diversion into illegal markets.

In Thailand, large-scale captive breeding facilities for lions and tigers supply animals for both domestic use and cross-border trade. While many of these facilities operate under legal frameworks, concerns persist that deaths, surpluses, or products derived from captive animals such as bones and body parts, may enter private ownership or online markets. Past enforcement cases demonstrate how captive animals can be diverted into the exotic pet trade. For example, in January 2024, authorities seized two 10-month-old pet lions after repeated sightings in residential areas. The investigation revealed irregular ownership documentation and failure to register the animals under the Wild Animal Reservation and Protection Act; the lions were reportedly purchased from a zoo (Anon, 2024).

Investigations also suggest that some facilities have supplied animals to buyers abroad, including in Viet Nam. Prior to this, in 2022, authorities disrupted a network trafficking a tiger cub from Lao PDR into Thailand. The same group was reportedly offering leopard cubs and other species (Wildlife Justice Commission, 2022)

In India, suspects were arrested in 2022 for advertising tiger cubs, including white tigers, for sale online via Facebook and WhatsApp, promising fast delivery (**Anon, 2022**).

In Indonesia, authorities seized four lion cubs and one leopard cub alongside 58 Indian star tortoises smuggled by speedboat from Malaysia to Java in 2019. The two men were allegedly part of an international trafficking syndicate, and they bought the haul from a smuggler in Malaysia. Both suspects were charged and sentenced to 4 years imprisonment and a fine of IDR 1 billion (USD 70,000) (**Anon, 2019**).

From a value perspective, live tigers traded as pets command the highest prices, particularly for cubs. However, the inclusion of leopards, lions, snow leopards, and cheetahs within the same trafficking networks suggests that the threat is structural rather than species-specific.

These cases collectively illustrate the structural threat posed by commercial breeding in the region. Even legal or partially regulated facilities can supply both domestic and international markets with live animals and derivatives. Cross-border trade and the potential for diversion into illegal channels underscore the need for stronger regulation, monitoring, and enforcement to prevent captive breeding from fuelling trafficking networks.

The adaptability of both consumers and traffickers connected through social media platforms and apps ensures that if exotic pets remain a lucrative status symbol, all ABCs face another growing conservation threat. This ongoing demand has contributed to the expansion of tiger farming and breeding facilities, raising concerns over blurred lines between legal and illegal sourcing (IUCN Specialist Group, n.d.; EIA, 2025).

PART 2

Overview of Illegal Trade in ABCs Across Range States (2000–2024)

CYBER-ENABLED ABC CRIME

The role of the internet has been transformative. The internet has facilitated wildlife crime for at least over a decade, with tiger parts detected for sale online in China as early as 2012 (Stoner, 2012). Since then, the online trade in big cats has grown in both scale and complexity, representing a persistent global threat. GITOC's Eco-solve initiative - which maps and addresses environmental crime across selected countries using data-driven insights - has provided new information on online big cat trade. This section analyses online activity across Indonesia, South Africa, Thailand from the Eco-solve dashboard (2024–2025) and draws on TRAFFIC's report (2023) of IWT within Viet Nam. The analysis highlights regional similarities and differences, improving understanding of trade extent and informing targeted interventions.
Across four key countries Indonesia, South Africa, Thailand, and Viet Nam over 6,000 advertisements of big cat trade online were detected revealing both similarities and differences in trade patterns *(Figure 35)*.

Tigers dominate listings, accounting for approximately 98% of all advertised species, although this likely reflects methodology and does not fully capture the broader trade. In South Africa, tigers were the least advertised species, with leopards (60%) and lions (21%) more prominent. Cheetahs accounted for 11%, and other species 8%. Parts dominated advertisements overall (99.8%), while live animals represented the rest. Across all live animal ads, 83% were lions and 17% were cheetahs.

Platform-level analysis shows that Facebook remains the dominant venue for online big cat trade, accounting for 55% of advertisements across the four countries, followed by Zalo (35%) and TikTok (4%). Previous investigations by EIA and TRAFFIC have also documented the use of TikTok, WeChat and other social media platforms to advertise tiger and leopard products in China, demonstrating the global and cross-platform nature of the trade. While these analyses capture clear trends, they are limited: Viet Nam's most recent data cover July 2021–June 2023, while Indonesia, Thailand, and South Africa data are from 2024–2025. Coverage focuses primarily on tigers, leaving other species underrepresented, and covert sales via encrypted apps and private groups remain largely undetected.

Figure 35 The number of advertisements of big cat trade online across four countries

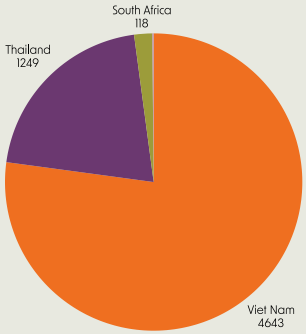
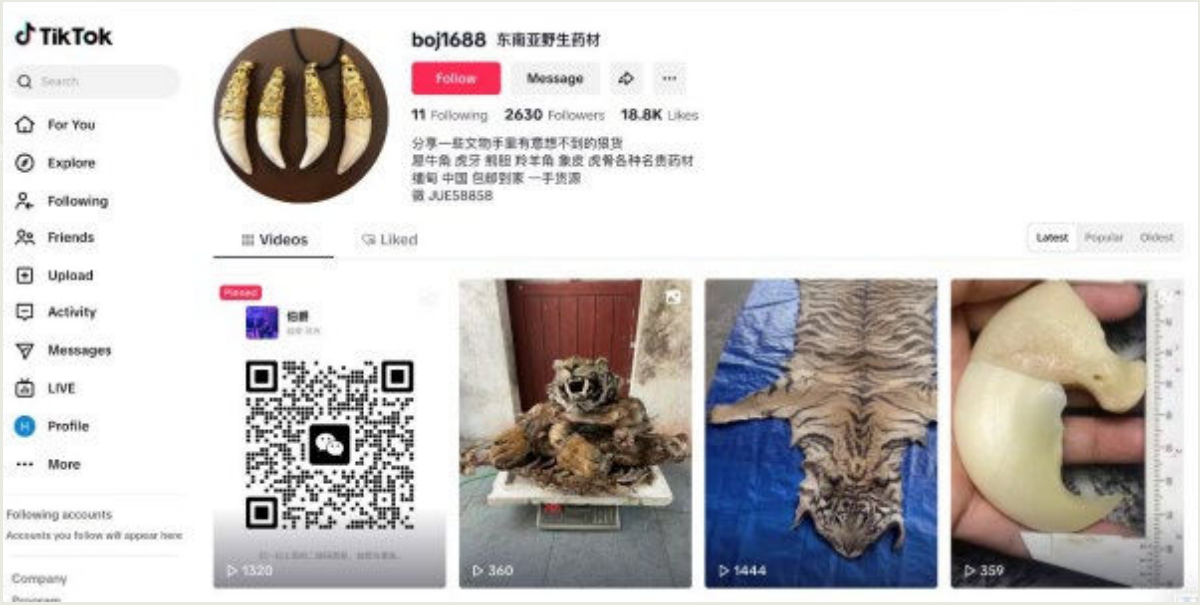
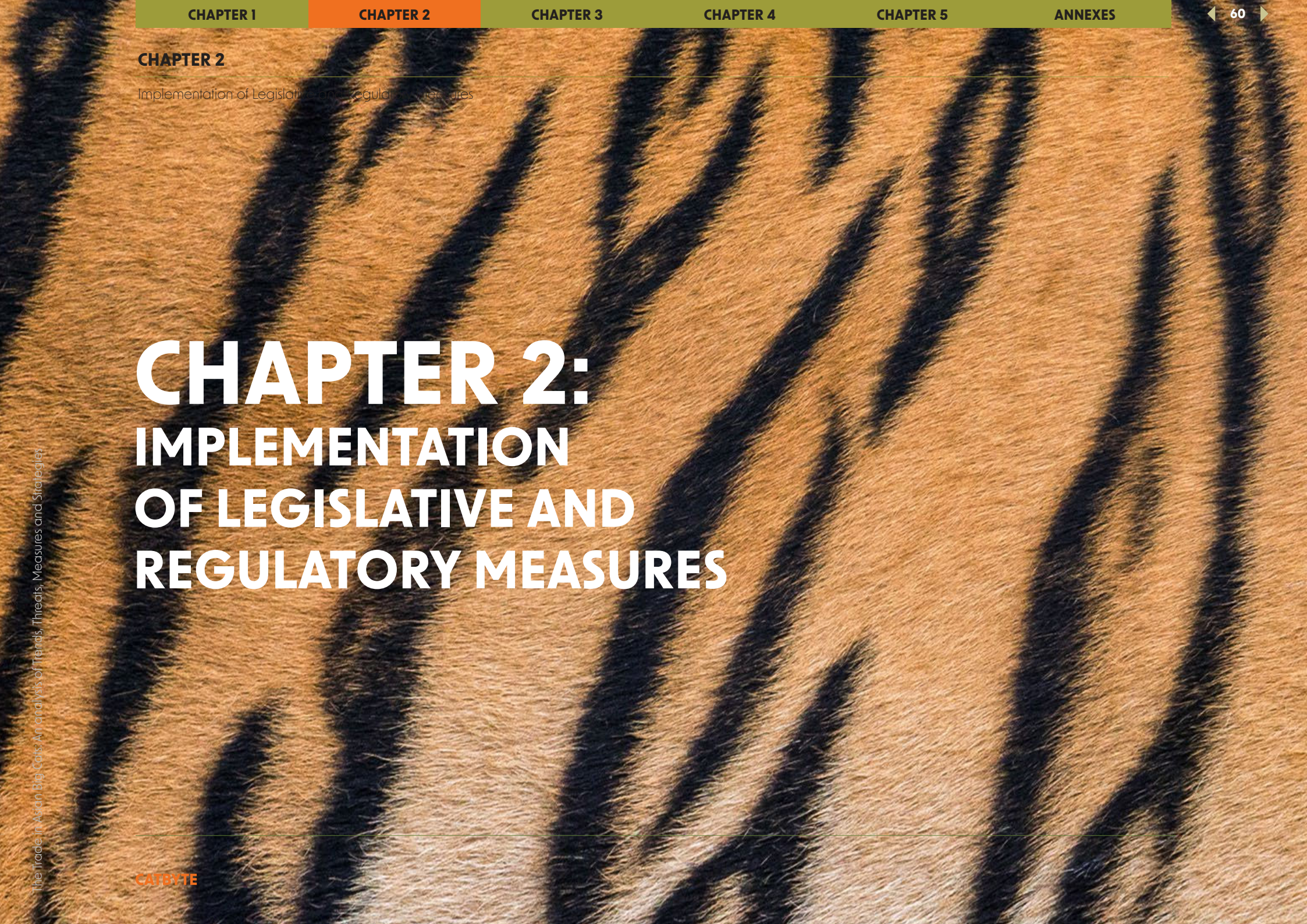


Image 1 Chinese advertisement on TikTok of tiger skins, carcass and claws[31]



[30] **https://www.ecosolve.eco/dashboard**
[31] Image 1, provided by EIA



CHAPTER 2: IMPLEMENTATION OF LEGISLATIVE AND REGULATORY MEASURES

CHAPTER 2

Implementation of Legislative and Regulatory Measures

Fundamental to the implementation of CITES measures is that Parties adopt a national legal framework that complies with the requirements for the effective implementation of the Convention: outlined in Res. Conf 8.4 (Rev.CoP15) (see Annex I). In accordance with this criterion, Parties' legislation is reviewed to determine the status for the implementation of CITES-enabling legislation. According to the most recent update (May 2025) only 17 out of the 33 ABC range States have been assessed as Category 1, 11 as Category 2, and four as Category 3 (Table 1).

In addition to the general obligation provided by Res. Conf. 8.4 and other cross-cutting resolutions to translate relevant CITES measures into domestic legislation, additional specific recommendations to ABCs have been adopted. These include national legislative and regulatory measures to secure adequate enforcement, ensure deterrent penalties, regulate captive breeding activities, and close domestic markets which are contributing to poaching or illegal trade. The BCTF Outcome Document provides further guidance related to these legislative and regulatory measures. An overview of these measures and BCTF guidance can be found on Annex II.

In 2018, the United Nations Office on Drugs and Crime (UNODC) published a *Guide for Drafting Effective Legislation to Combat Wildlife Crime*. This sets out a broader spectrum of recommended provisions, offering guidelines recognised by CITES as a model to regulate the international trade of endangered species.

While important strides to implement CITES measures and other guidance to address the trade in ABCs have been reported, persistent gaps and ambiguities are still being observed. Analysis by Legal Atlas, WWF, and TRAFFIC (Wingard *et al.* 2025) on the legislation of TRCs as it relates to tiger trafficking points to some common legal and regulatory challenges and practices in the region; these include critical exemptions, inconsistencies, and lack of implementing regulations. Such gaps open opportunities for trading activities that may go unregulated despite progress in implementing CITES measures.

Table 1: CITES Parties Legislative Review Update

PARTY (IES)	STATUS	LAST UPDATE
Cambodia, China, Georgia, India, Indonesia, Iran, Israel, Lao PDR, Malaysia, Pakistan, Russia, Saudi Arabia, Thailand, Turkiye, UAE, Viet Nam, Yemen	Category 1	2025
Azerbaijan	Category 2	2023
Bangladesh, Nepal, Uzbekistan	Category 2	2024
Armenia, Bhutan, Kazakhstan, Kyrgyzstan, Mongolia, Oman	Category 2	2025
Myanmar	Category 2	2020
Afghanistan	Category 3	2019
Iraq	Category 3	2021
Sri Lanka	Category 3	2023
Tajikistan	Category 3	2018
Turkmenistan	P	N/A

2.1 LEGISLATIVE AND REGULATORY MEASURES REVIEW

ADDRESSING ILLEGAL TRADE AND INCREASING DETERRENCE

CITES Res. Conf. 12.5 (Rev. CoP19) urges Parties to "adopt comprehensive legislation (...) to ensure that there are provisions for deterrent penalties and that it addresses illegal trade in and/or possession of illegally traded specimens of native and non-native Asian Big Cat species". In this regard, (Wingard *et al.* 2025) identify significant variations in how tiger trade is regulated across jurisdictions. Some Parties implement strong custodial and financial sentences, while others rely mainly on administrative fines, which are often deemed to be too low to deter or disrupt TOC.

Importance of Targeting Financial Gains

IWT is a lucrative illegal market generating billions of criminal proceeds every year (FATF, 2020). It attracts a range of criminal actors, from opportunists to organised syndicates, due to its perceived low risk and high reward (BIG, 2021), making financial incentives a key motivator to engage in wildlife crime. Financial penalties must adequately reflect the seriousness of these crimes in order to act as a deterrent, as low fines may be easily incorporated as "operating costs" by TOC groups engaging in illegal activity (UNODC, 2018). Complementing wildlife laws with applicable asset forfeiture powers and anti-money laundering (AML) legislation has also proven to be an effective way to target profits from these crimes (Spicer & Grossman, 2022), thereby increasing the framework's deterrent effect. While jurisdictions with an "all crimes" approach allow for any crime to serve as grounds for AML investigations and penalisations, others use more selective approaches. Only crimes explicitly included in AML legislative schemes or reaching specific threshold conditions can trigger the use of AML legislation (Wingard *et al.* 2018). This poses greater challenges when addressing IWT, as these offences are often not included within these criteria (Ibid.).

Advancing Commensurate Sentences

Under UNTOC standards, a serious offence is one that is punishable by a maximum sentence of a minimum of four years in prison[32]. Several Parties have made strides in aligning wildlife offences with international standards. For example, the Legal Atlas legal intelligence platform highlights Cambodia's CITES Management Sub-Decree as a good practice in harmonising wildlife crime penalties with the UNTOC. Several Parties have also criminalised CITES violations and/or classified them as serious crimes under UNTOC standards, constituting an important step in the sentencing of wildlife crime (WJC, 2025a). Most recently, various Parties have also revised their legislation to increase penalties related to wildlife crime offences:

Indonesia revised its wildlife conservation l*aws through Law No. 32 of 2024 on the Conservation of Biological Natural Resources and their Ecosystems,* allowing for custodial sentences of up to 15 years and fines reaching more than USD 133,513[33] (WCA, 2024). Malaysia's *Wildlife Conservation Act 2010* was amended in 2022 to introduce stronger penalties against wildlife crime, reaching up to 15 years' imprisonment and to USD 237,670[34] in fines (SC78 Doc. 33.12.1). Similarly, a 2019 amendment to Thailand's *Wildlife Conservation and Protection Act* increased penalties in terms of fines and prison sentences, allowing for terms of up to 10 years and USD 47,276.7,[35] depending on the crime type (Faolex, N.D.). Thailand's legal framework also permits the application of money laundering charges to IWT offences, enabling the seizure and freezing of offenders' assets (WWF, 2022). China's *Criminal Law* provides sentences of five years or more for trading, purchasing, or transporting tiger products (TRAFFIC, 2015), as reflected in a 2018 conviction for selling tiger bone wine (EIA, 2018). The Party has also reported that, through its 2022 amendment to its *Wildlife Conservation Law*, penalties and law enforcement cooperation are expected to be further strengthened (SC78 Doc. 43.2). In Viet Nam, the *Penal Code* allows for penalties up to 15 years' imprisonment and high fines (UNODC, 2024) leading to convictions, for instance, in a seven-year sentence of a high-level trafficker (Education Nature Viet Nam, 2025). However, the average sentence for tiger trafficking in Thailand has been reported as 2.7 years, which the Deputy Director of the nationally based NGO, Education Nature Viet Nam (ENV), has deemed insufficient given the seriousness of the crime (Chinh Thong, 2025).

In the United States, criminal penalties for wildlife crime may include up to 20-year prison sentences and fines up to USD 1,000,000 (FATF, 2020). In 2024, the EU endorsed a revision of the *Environmental Crime Directive*, which specified sanctions of no less than three years imprisonment to offenders found guilty of poaching and trading threatened species (EurLex, 2024). While NGOs still consider these penalties insufficient, the revision nonetheless represents a

[32] United Nations Convention against Transnational Organized Crime, Article 2 b
[33] £98,500 original source, converted on September 15, 2025
[34] RM1 million original source, converted September 15 2025
[35] THB 1.5 million original source, converted September 17 2025

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significant step forward from the previous Directive (Eurogroup for Animals, 2024).

CLOSING DOMESTIC MARKETS AND ADDRESSING DEMAND

Through Res. Conf. 12.5 (Rev. CoP19), CITES urges Parties to "take all necessary legislative, regulatory and enforcement measures to close their domestic markets for commercial trade" in ABCs that are contributing to poaching or illegal trade. In doing so, the TRC legislation report (Wingard *et al.* 2025) stresses the importance of clearly defining and regulating all relevant acts in the trade chain, not only those involving sourcing (e.g., poaching) and transactions (e.g., sale or exchange), but also, for instance, possession, transport, processing, solicitation, and online sales. UNODC guidelines likewise emphasise the inclusion of a comprehensive set of defined offences, including those occurring in digital environments. In the context of CITES, doing so requires offences to be applicable, not only to Appendix I species themselves, but also to products containing or claiming to contain parts and derivatives of these species (see CITES Res. Conf. 9.6 [Rev.CoP19]).

The incorporation of a comprehensive list of offences and definition of offences has been a challenge throughout the entire ABC range. In TRCs, even Parties with relatively complete approaches do not consider all crucial steps of trade (Wingard *et al.* 2025). The penalisation of possession has been of particular concern, and at the time of writing, Parties have been invited to adopt amendments to Res. Conf. 8.4 to, among other things, direct the Secretariat to identify Parties whose domestic measures do not provide the authority to penalise possession of CITES listed specimens (COP20 Doc.37). The last review on ABCs also noted the penalisation of end consumers as a theme of concern, particularly in China, where possession is not prohibited nor criminalised (COP18 Doc.71.1).

Markets in China

China, frequently identified as one of the major destinations for illegal big cat products (Goodrich *et al.* 2022), has reported that its legislation prohibits the movement, transport, and trade of tiger specimens without exception (SC78 Doc. 73.1). Its *Criminal Law* punishes the consumption of protected species, as reflected in a 13-year prison sentence for eating tiger meat (Aljazeera, 2014). However, concerns persist regarding gaps in regulatory clarity and limitations in the implementation of marking schemes (EIA, 2023). Exemptions permitting the use of certain species under Special State Protection have been highlighted as particularly problematic (CoP18 Doc. 71.1). Additionally, reports that leopard bone wine has been designated as an intangible cultural heritage and widely promoted have raised concerns about increased domestic demand and the potential for species substitution or mislabelling, both of which have been documented previously (SC75 Doc. 13).

Online markets

IWT undoubtedly has a presence on social media and e-commerce platforms (WWF Asia-Pacific, 2021; Raman, 2025). The documented growth and prominence of online trade has been noted in previous reviews (SC75 Doc. 13), highlighting the regulation of online markets as a critical consideration when addressing all relevant trade activities necessary for closing domestic markets. China's *Wildlife Protection Law* has prohibited since 2018 internet and logistics companies from providing mechanisms for buying and selling illegal wildlife products and, in 2022, it explicitly prohibited the 'display' of these products in online platforms (IFAW, 2023). This onus on private sector entities is notable, as none of the other TRCs impose legal responsibilities and obligations on online platform operators providing critical infrastructure that enable these acts (Wingard *et al.* 2025). Through its 2024 amendments, Indonesia's *Wildlife and Nature Conservation Law* also incorporated both the advertising and sale of protected wildlife and their body parts using electronic or other media.

Viet Nam, another major consumer of tiger and other ABCs (Davis *et al.* 2020), has reported a rise in demand for big cat specimens (SC78 Doc.43.1). Studies in the country have documented significant online trade, with 643 tiger sellers identified between July 2021 and June 2023, and advertisements increasing by 26% during this period (TRAFFIC, 2023). Addressing this, Vietnamese legislation prohibits online advertising of tiger products but does not explicitly regulate online trade (Ibid.). This is the case in most TRCs, which (with the exception of some minor regulations) do not fully recognise offences related to the online trade of products containing, or claiming to contain, ABC parts and derivatives (Wingard *et al.* 2025).

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STRENGTHENING REGULATION OF CAPTIVE BREEDING FACILITIES

While CITES permits the regulated trade in captive-bred specimens of Appendix I species under certain conditions, oversight of such facilities varies among Parties. CITES Decision 14.69 recognises the need to limit tiger breeding operations only to a level supportive of conservation purposes, explicitly stating that tigers should not be bred for trade in their parts and derivatives. Furthermore, the BCTF Outcome Document offers guidance on actions required to strengthen the regulation of facilities breeding big cats in captivity, which include licensing requirements, husbandry standards, inspections, and the establishment of centralised databases. Yet various sources have reported that regulatory gaps of captive breeding facilities have been exploited by those trafficking ABCs (UNODC, 2024; Four Paws, 2024; WJC, 2022).

Facilities keeping big cats may be considered of concern when they keep and breed species with the intent (or reasonable probability of) engaging, directly or indirectly, in the commercial trade of this species, their body parts and derivatives (AZA *et al.* 2023). These activities undermine enforcement efforts and go some way towards perpetuating demand (Ibid.), while some Parties lack comprehensive regulatory frameworks for monitoring breeding, transfers, or the sale of specimens undertaken by these facilities (Wingard *et al.* 2025). As such, at SC78, Parties were encouraged to develop standardised procedures for handling captive-bred wildlife specimens, maintaining registers, and reporting to relevant authorities to strengthen existing provisions.

Captive Breeding in Range States

It was estimated in 2023 that there were about 8,900 tigers being held in 300 or more facilities in East and Southeast Asia alone (AZA *et al.* 2023). Over 6,000 of these tigers were found in China, with the remaining located predominantly in Thailand (about 1,635), Lao PDR (451), and Viet Nam (395) (Ibid.).

At SC78, Viet Nam reported that its domestic laws strictly prohibit the captive raising of tigers for commercial purposes, with facilities keeping tigers requiring strong oversight in the form of, for instance, detailed inspection reports and animal logbooks. However, ENV has raised concerns regarding recent trends observed in-country. The NGO reported 66 cases related to illegal tiger trade between 2018 and 2024, 65% of which originated from the Nghe An province. Potentially only representing a small fraction of tigers trafficked, these cases suggest that licensed zoos in this province may be involved in the sourcing and laundering of cubs (ENV, 2025). In the past, the police had already discovered and raided illegal "basement farms" engaging in the trafficking of tigers in the region, confiscating 17 tigers from a single residence in 2021 (ENV, 2021; WWF, 2024a). ENV sources have also identified at least 300 tigers being raised by residents of Nghe An on behalf of traffickers (ENV, 2025).

The cases in Viet Nam often involved the smuggling of cubs, carcasses, and body parts from Lao PDR, a Party that has been subject to a CITES Article XIII[37] process since 2014 (SC67 Doc. 12.1) for several reasons, including its tiger farm operations. As part of the Article XIII process, the CITES Standing Committee has made several recommendations to Lao PDR on tiger farms including completing an audit of tigers kept in captivity, taking measures to restrict the breeding of tigers in captivity, and prohibiting the establishment of new tiger facilities (SC78 Doc. 33.8). After its mission to the country in 2023, the Secretariat expressed serious concerns about the strength of Lao PDR authorities' power to conduct inspections of tiger facilities, since it (i.e., the Secretariat) had been denied access by the owners to some facilities it was scheduled to visit as part of its mission (SC77 Doc. 41.2). Further, the Secretariat's report for the most recent meeting of the Standing Committee indicates that most of the Committee's recommendations to Lao PDR on tiger farms remain unimplemented (SC78 Doc.33.8).

Since then, some advancements have been made on paper by the Party. Lao PDR has adopted Guidance for the Inspection of Captive Tiger Facilities, developed with technical and financial support from NGOs and relevant experts (WWF, 2024b). This provides standardised procedures for monitoring and inspecting captive tigers to ensure compliance with national and international regulations, while also addressing animal welfare and security concerns. They have also adopted a Standard Operating Procedure on the management of captive tiger facilities and the Disposal of Deceased Tigers in Captivity, which establishes clear protocols for handling tiger carcasses to prevent misuse, trafficking, or illegal trade of tiger parts and derivatives (DOF, 2025; SC78 Doc. 33.8). The **Prime Minister's Order No. 25** also replaced Order No. 05 to include a major focus on addressing and managing tigers in captivity. However, at the time of writing, there is no evidence of implementation of these recently adopted measures and is therefore too early to determine their efficacy.

[36] Law No. 32/2024 Article 21

[37] The Article XIII process is broad in scope and principally used when several compliance issues simultaneously affect a Party. At SC77, through the application of Article XIII, the SC agreed that Parties suspend trade in specimens of all CITES-listed species for commercial purposes until Lao PDR has substantially achieved specific recommendations (Notification to the Parties 2023/127).

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Concerns have also been raised regarding the captive breeding of tiger specimens in China. Through its 2018 State Council Notice on Strictly Controlling the Trade and Utilization of Rhinoceros and Tiger and Their Products, the Party repealed its 1993 ban on use of tiger bones to allow the use of farmed tiger bone in eligible hospitals (State Council, 2018 a). However, this measure appears to have been paused following a public outcry (Xinhua, 2018). Furthermore, in November 2018, the NFGA issued a new statement introducing the "Three Strict Bans," meant to replace its earlier policy (State Council, 2018 b), although this has not been transposed into law (Banks, 2022). More recently, the Party has reported on several provisions used to regulate the captive breeding of tigers, including the *Wildlife Conservation Law* (last amended in 2022), which requires authorisation for the captive breeding of tigers and subjects these activities to a licensing system. Facilities are required to maintain registers documenting births, deaths, and carcasses and undergo regular inspections (SC78 Doc. 43.2). However, special licenses can still be issued to sell, purchase or utilise species for captive breeding, public exhibition shows, cultural relics protection, and other special circumstances. [38]

Captive Breeding of Non-native and Hybrid Species

Different ABC species also have different levels of protection under national laws, which may complicate monitoring further. The commercial trade for some species and sources is allowed, while for others it is prohibited, which may lead to misunderstandings that facilitate the laundering of protected species (SC75 Doc. 13). For instance, reports from NGOs note concerns about hybrid species often falling outside existing legal definitions of wildlife, placing them beyond the reach of enforcement (Wingard *et al.* 2025). According to **CITES Resolution Conf. 10.17 (Rev. CoP14)**, hybrid species having a recent lineage (defined as the previous four generations of lineage) with species listed on Appendix I and II are subject to the provisions of the Convention, even when the hybrid itself is not listed on CITES Appendices. Yet only a few Parties, such as Malaysia, Viet Nam, and the Russian Federation, explicitly include hybrids under their regulatory frameworks.

What's more, national frameworks often do not grant the same level of protection to non-native species as they do for native species (SC70 Doc.51). Acknowledging the challenges posed by these exemptions, previous CITES-commissioned reviews on the implementation of ABC measures have urged Parties to amend their legislation so as to include non-native species (e.g., COP18 Doc. 71.1). The trade in specimens of non-native big cat species has become a growing concern, with reports suggesting that economic growth and a lack of comprehensive regulation have led to its rapid expansion. This trend is exploited by criminal organisations and contributes to the continued illegal trade in other big cat species (**EMS, N.D, Four Paws, 2024**, Fourage *et al.* 2025). Of particular concern have been the captive breeding operations in South Africa, where regulations for the captive breeding of big cats are considered fragmented and ineffective, while various facilities have been found to have trafficking links with China, Viet Nam, Lao PDR, and Thailand - (Four Paws, 2024) - Parties that have been identified as consumer status and/or hotspots of trade.

Non-Range States

South African legislation, the *National Environmental Management Biodiversity Act (NEMBA)* considers tigers to be alien species, thus allowing for the legal farming and (regulated) hunting of this species (DFFE, 2017). The Minister of Forestry, Fisheries, and Environment confirmed that, in 2020, at least 463 tigers were being kept in 70 facilities (DFFE, 2022). In the past, the Party has been criticised for its lack of control over its commercial tiger operations, and for allowing the domestic trade of captive-bred tiger parts and derivatives, which does not accord with Resolution Conf. 12.5 (Rev. CoP19) (UNODC, 2020; EIA, 2018). In response to recent critiques, the South African Department of Forestry Fisheries and Environment asserted that tiger trading operations are small scale and for non-commercial purposes (Conservation Action, 2025), supporting its statements at the SC77, where the Party specified that most tigers exported from commercial-scale breeding operations are destined for zoos, safari parks, and exhibition facilities which constitute non-commercial purposes. The Party also maintained that captive breeders of Appendix I species for international commercial trade are registered with the provincial Management Authorities and the CITES Secretariat, while the Management Authority has the right to inspect premises and records at any given time (SC77 Doc.41.1). However, despite there being no captive breeding facilities for tigers registered in South Africa with the CITES Secretariat to date (Cruise, 2025), the CITES Trade Database (2010-2020) shows records of tigers and their parts being exported from South

Africa for commercial purposes (EIA, 2023b). Recent reports further sustain that the Party remains the biggest non-range State exporter of live tigers and that almost 200 live specimens were exported between 2016-2021, which raises questions about the scale and purpose of such trade (Cruise, 2025).

[38] Wildlife Protection Law. 2023. Article 28

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The most recent study on big cats commissioned by CITES highlighted that the United States has the highest number of privately owned tigers, with around 10,000 animals held as pets or in private zoos (SC75 Doc.13). Since then, the Party passed the *Big Cat Public Safety Act (BCPSA)*, restricting the possession and use of big cat species (FWS, 2023) and reported a near total ban on tiger parts and products in its domestic market, also prohibiting their sale for human consumption and application through its *Rhino and Tiger Conservation Act* (SC78 Doc. 43.2). The BCPSA placed restrictions on the breeding and commercial use of all big cat species (SC78 Doc. 43.1). These provisions reportedly represent one of the most comprehensive measures addressing the captive breeding of big cats (WWF, N.D. a). The Party further reported conducting unannounced inspections through multiple agencies, including the US Department of Agriculture and state level wildlife agencies (SC78 Doc. 43.2). In 2023, offences under the BCPSA resulted in an arrest and prosecution for selling and attempting to sell protected wildlife, with offenders facing up to five years in prison and a USD 20,000 maximum fine (DOJ, 2023). Nonetheless, conservation NGOs have highlighted ongoing concerns regarding exemptions and regulatory gaps, noting that some facilities continue to operate in ways that may put big cats' welfare at risk, both within and outside the scope of the Act (Born Free, 2024).

2.2 CASE STUDIES ON LEGISLATIVE AND REGULATORY MEASURES

Case Study 6: Captive breeding legislation in Thailand

In Thailand, concerns have been raised regarding the effectiveness of legal measures to address the captive keeping and breeding of big cats. This is particularly the case for non-native species, such as lions, and hybrids, which have been listed as "controlled" and "dangerous" but have not been granted a "protected" status (Fourage *et al.* 2025). Despite the introduction of licensing requirements for the keeping of non-native species under WACPA's 2019 amendments, individuals are still permitted to keep lions in their homes, and unlicensed zoos may continue to display non-native species. This undermines efforts to control breeding, prevent illegal trade, and ensure adequate welfare conditions for these animals (Ibid.).

With regards to native species, the country has advanced stricter controls and regulations. However, Thailand's WACPA provides clear prohibitions of trade in ABC parts and products [39]. The provisions governing the keeping and breeding of tigers appear to have gaps, which have contributed to the Party's role as a source of illegal tiger specimens. Thailand houses the largest population of captive tigers in South-East Asia and is reported to be a source for illegal specimens in trade in the region (COP18 Doc. 71.1; EIA, 2020b).

Legal captive tiger facilities in Thailand fall into three broad categories: a) government zoos and rescue centres; b) private licensed zoos; and c) private possession through licenses. According to government figures, as of 2024, there were 1,382 tigers in captivity in Thailand with 107 in government facilities, 1,201 in licensed private zoos, and 74 in private licensed possession (DNP, 2024). These figures have fallen slightly from the previous report of April 2023 when there were 1,540 tigers reported to be in captivity (170 in government facilities, 1,270 in licensed private zoos and 100 in private possession). [40]

As part of the CITES Secretariat review of captive tiger facilities of potential concern in Thailand, it was noted that most of the tigers kept in the facilities it visited do not seem to have intrinsic conservation value and were not being used for any broader educational purposes (SC77 Doc. 41.2). The Standing Committee has encouraged Thailand to restrict the breeding and import of captive tigers, prohibit the establishment of new captive tiger facilities with narrow exemptions where warranted, and restrict possession of parts and derivatives to prevent these specimens from entering illegal trade (COP20 Doc. 77.2).

WACPA requires zoos to be licensed in order to operate and defines zoos as including places where wild animals are bred in the interest of the business of the zoo.[42] Thailand has reported approving a Ministerial Regulation in April 2024, which includes comprehensive zoo management standards applicable to tiger populations. With non-compliance leading to suspension or revocation of permits, national

[39] Section 29 of the Wild Animal Conservation and Protection Act, 2019.
[40] CITES Big Cats Task Force. 2023. Legal & practical frameworks for management of captive tiger facilities in Thailand. Presentation of Dr. Prasert Somsathapornkul, Director of Division of Wild Fauna and Flora Protection, Department of National Parks, Wildlife and Plant Conservation, Government of Thailand.
[41] Section 33 of the Wild Animal Conservation and Protection Act, 2019.
[42] Paragraph 15 of Section 4 and Section 35 of the Wild Animal Conservation and Protection Act, 2019.
[43] Section 33 of the Wild Animal Conservation and Protection Act, 2019.

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agencies have reportedly initiated strict administrative measures (SC78 Doc. 43.1). Zoos are required to submit a plan for the zoo in compliance with standards for zoo management. However there is no stipulation in WACPA for zoos to perform any conservation function. Furthermore, at the time of writing, no specifications have been provided on how this regulation is being implemented and monitored and is therefore too early to determine its efficacy.

Outside of government and licensed zoos, legal private possession of captive tigers in Thailand occurs through licenses for temporary possession issued under *WACPA*.[44] These licenses appear to be restricted to accommodating possession which was occurring at the time when stricter measures came into force due to an amendment of the legislation. They do not appear to allow for breeding. However, WACPA does not specify a timeframe for the expiry of licenses for temporary possession nor is there clear guidance on the monitoring of the animals covered by these licenses. Influenced by the Secretariat's mission in 2023, the Party is reportedly in the process of drafting additional regulations to govern operations of private and public zoos.

Despite these positive steps the WACPA contains provisions which may complicate an enforcement response of legal violations by zoos. When licensees violate the provisions of the WACPA, they are first given an opportunity to rectify the violation[45], and even when such rectification does not occur, and this results in an order for revocation of a license, the licensee is given a range of choices and a period of one year in which to deal with the animals or carcasses in their possession.[46] Enforcement measures in the form of seizures of tigers and their parts have occurred from licensed zoos in Thailand, with perhaps the most well-known being the seizure of 147 live tigers and 70 tiger cub carcasses from the Tiger Temple (EIA, 2017). However, it is not clear whether there have been prosecutions or convictions of licensees for violations of WACPA concerning tigers.

Case study 7: Proven approaches in Indian Legislation

India's legal framework has been widely regarded as one of the most comprehensive among ABC range States (SC65 Doc. 38). Its core legislative instrument, the *Wildlife (Protection) Act*, 1972 (WLPA), has been previously cited as a best practice in aligning with the CITES Resolution Conf. 12.5 (Rev. CoP19) and related Decisions (Ibid.). The WLPA prohibits the hunting, unlicensed possession, transport, and trade of tigers, leopards, snow leopards, clouded leopards, and Asiatic lions, all listed under Schedule I, granting them the highest protection under Indian law (SC70 Doc.51).

The Act applies to both domestic and international trade, with explicit provisions making trade offences punishable by imprisonment (3–7 years) and fines no less than USD 283.468[47] for a first offence and no less than USD 1,133.87[48] for a second offence, with no upper limit in both instances (Section 51 WLPA) (SC70 Doc.51). Notably, the burden of proof is reversed: individuals found in possession of protected specimens must demonstrate lawful ownership. Ownership certificates could only be obtained during a fixed registration period that has since expired, effectively banning the legal acquisition of new specimens. Transfers are limited to inheritance, and trade is restricted to regulated exchanges between recognised zoos.

The Wildlife Crime Control Bureau (WCCB) was established under the WLPA to strengthen enforcement. The WCCB is mandated and empowered, through WLPA Section 38Z, to collect and collate intelligence, maintain a wildlife crime data bank, coordinate inter-agency actions, assist foreign authorities and international organisations, support customs authorities, and advise the Government of India on wildlife crime-related issues (WCCB, N.D.). This creates a national-level focal point for coordinated enforcement.

India's regulatory framework extends beyond wildlife-specific laws. The Customs Act (1962) and the Export-Import Policy prohibit cross-border movement of ABC specimens in violation of CITES and the WLPA, while the *Prevention of Money Laundering Act* (PMLA) expands enforcement to financial crime. Amendments to the PMLA in 2012 removed a monetary threshold, meaning wildlife crimes of any value can now serve as predicate offences for money laundering (Wingard & Pascual, 2018). This has increased the scope for prosecuting both low-value and large-scale trafficking cases under financial crime statutes.

Despite this robust framework, India continues to report high volumes of seizures of ABC parts and derivatives. While this demonstrates active enforcement and is reflective of their high abundance of wild ABC populations, the predominance of smaller seizures (see analysis in Chapter 1) may indicate that trafficking in the country occurs largely through lower-volume transactions, that larger consolidated shipments are not taking place as much as they did previously, or that shipments are being intercepted before they move further up the trade chain. In a case where the latter is true, complementing legal frameworks

[44] Section 11 of the Wild Animal Conservation and Protection Act, 2019.
[45] Section 76 of the Wild Animal Conservation and Protection Act, 2019.
[46] Section 79 of the Wild Animal Conservation and Protection Act, 2019.
[47] INR 25,000 original source, converted on 16 September 2025
[48] INR 100,000 original source, converted on 16 September 2025

with strengthened enforcement, (e.g., by increasing intelligence-led approaches) could support the country's ability to target and intercept individuals operating at higher levels of the supply chain. The country has also reported high numbers of tiger imports from South Africa, raising concerns that these quantities may be indicative of commercial intent (Cruise, 2025). As such, in addition to India's legal and regulatory measures, it would be crucial to strengthen legal frameworks by all countries in respective supply chains and employ collaborative operational approaches.

2.3 RECOMMENDATIONS ON LEGISLATIVE AND REGULATORY MEASURES

Measure: "adopt comprehensive legislation or, where applicable, review existing legislation, to ensure that there are provisions for deterrent penalties and that it addresses illegal trade in and/or possession of illegally traded specimens of native and non-native Asian big cat species" Resolution Conf. 12.5 (Rev. CoP19)

Good practice: Several Parties' legal framework allow for the punishment of IWT offences in accordance with "serious crimes" as defined under the UNTOC and enable the use of money laundering provisions. These constitute important steps to deter criminal actors from engaging in the illegal trade of ABCs.

Good practice: India's legal framework presents a relatively comprehensive approach to addressing ABC trade, recognising a large number of offences relevant to wildlife crime. Notably, when regulating the possession of protected species, it puts the onus on individuals found in possession to demonstrate the legality of their specimens.

Challenge: Most Range States do not explicitly penalise and define all trade acts relevant to the illegal trade of ABCs, their parts, and derivatives.

Opportunity: Parties can ensure that all relevant offences, including those relating to possession and online trade are explicitly criminalised and defined within their legal frameworks. This would provide clarity to all actors involved in this trade, including consumers, regarding what constitutes an illegal act.

To strengthen deterrence, measures must be accompanied by comprehensive legal measures that enable addressing all key areas of the ABC trade. The utilisation of AML provisions and asset forfeiture powers have received relatively less attention in this regard. Given the high market value of ABC products and their appeal as low-risk, high-reward commodities, targeting illicit gains can reduce the incentives driving criminality. As such, opportunities to disrupt critical criminal incentives are missed where frameworks do not provide for asset forfeiture or financial investigations in relation to ABC offences.

Parties can be further encouraged to report to the Secretariat on developments in advancing deterrent penalties, including on commensurate (financial and custodial) sentences and the use of money laundering and asset forfeiture provisions in wildlife trade offences

Measure: "all Parties in whose jurisdiction there is a legal domestic market for specimens of tiger and other Asian big cats species that is contributing to poaching or illegal trade, take all necessary legislative, regulatory and enforcement measures to close their domestic markets for commercial trade in tiger and other Asian big cat specimens." Resolution Conf. 12.5 (Rev. CoP19)

Good practice: In China, strengthened penalties and expanded law enforcement mandates have resulted in notable seizures and high-level convictions. The Party has also regulated online trade and advertising of wildlife products, including by placing the onus on the internet and logistics companies – the only Party to do so. These practices are commendable, as they provide a legal framework that enables comprehensive enforcement.

Challenge: Reports continue to document China as one of the significant markets for ABC parts and derivatives, while national legislation still allows products such as leopard bone to be legally traded and consumed. These gaps can be exploited for the laundering of protected species or mislabelling products to confuse consumers and enforcement, undermining the deterrent effect of otherwise strong legislation.

Opportunity: Building on existing progress, measures such as removing exceptions for leopard bone trade, improving transparency on the management of stockpiles, and ensuring that trade bans explicitly apply to captive-bred specimens could strengthen the country's regulatory framework and reduce

[39] Section 29 of the Wild Animal Conservation and Protection Act, 2019.

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opportunities for exploitation by traffickers. Additionally, transposing the three strict bans of the State Council into law would reinforce their implementation.

Measure: "those Parties and non-Parties in whose territories there are facilities keeping tigers and other Asian big cat species in captivity to ensure that adequate management practices and controls are in place and strictly implemented to regulate the activities of these facilities." Resolution Conf. 12.5 (Rev. CoP19)

Good practice: Many Parties have reported significant strides in amending their legislation and regulatory standards for the management of captive breeding facilities, as documented at SC78 and SC77. The United States has made notable progress in managing the possession and use of all big cats through the BCPSA, with compliance reinforced by unannounced inspections.

Challenge: The captive breeding of ABC species remains a concern due to its observed role in facilitating the illegal trade of these animals. These concerns apply not only to key range States, such as Lao PDR, Thailand, and Viet Nam, but also to non-range States, including South Africa.

While specific recommendations have been provided to Lao PDR for the management of captive tiger facilities, the latest reporting by the Secretariat cannot confirm progress in several key areas (SC78 Doc. 33.8). Facilities in Nghe An, Viet Nam, continue to be documented as important suppliers. In South Africa, the lack of explicit protections for non-native species, including tigers, is reportedly exploited to export large volumes of these animals. In other cases, strong management standards and penalties for non-compliance may be undermined by regulatory gaps, such as inefficient licensing schemes. This appears to be the case in Thailand, where lenient time limitations on licenses may allow the trade of unauthorised specimens to go undetected.

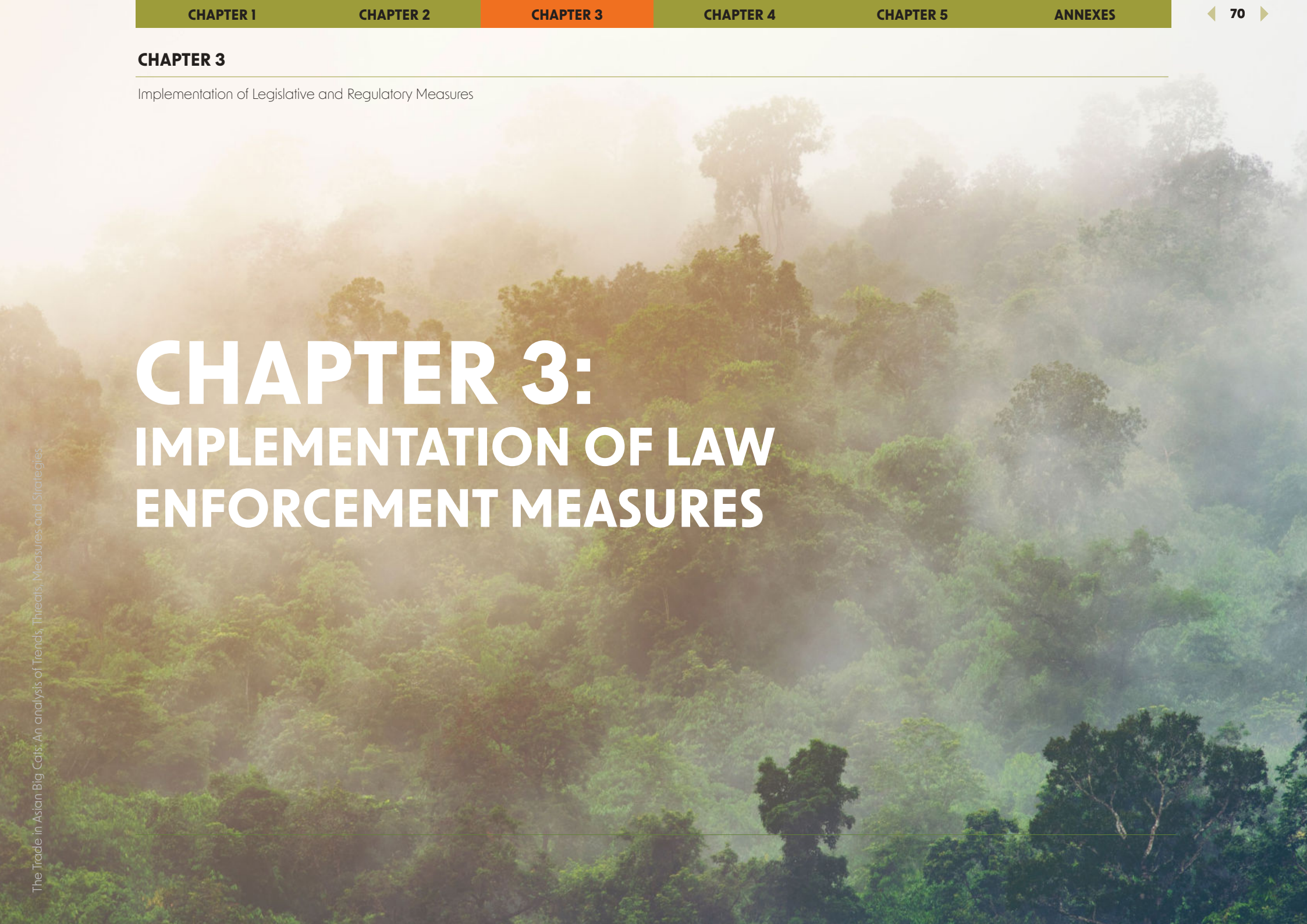
Opportunity: Given the high number of incidents linking captive-bred specimens from these Parties to the illegal trade in ABC species, opportunities to strengthen their frameworks regulating captive breeding should be explored. Section 2 of the BCTF Outcome Document provides useful guidance in this regard, including recommendations for stricter licensing schemes with renewal requirements, regular inspections, and regulation of private ownership. Implementing these measures would significantly enhance the legal and regulatory frameworks of the Parties concerned.

Measure: "Parties with intensive operations breeding tigers on a commercial scale shall implement measures to restrict the captive population to a level supportive only to conserving wild tigers; tigers should not be bred for trade in their parts and derivatives." Decision 14.69
Challenge: The absence of consistent definitions for terms such as "conservation purposes" or a clear understanding of "supportive to conserving wild tigers" may allow for illegitimate facilities to remain undetected. This lack of clarity can enable commercial breeding operations to present themselves as conservation-oriented facilities, using CITES purpose code "Z" (zoo) to facilitate trade.

Opportunity: Establishing well-defined standards clarifying which breeding activities legitimately fall under conservation purposes, including what is within the scope of true 'conservation education', would assist Parties in identifying and regulating facilities of concern, while closing avenues for illegal trade.

Such definitions would also benefit ABC welfare. For instance, the United States' BCPSA, while widely acknowledged for its clear provisions on the captive keeping and breeding of big cats (WWF, N.D. a; Block & Amundson, 2023), may still contain loopholes allowing for ABCs to be exploited for human entertainment. Limiting the captive breeding of big cats to well-defined conservation purposes may improve the conditions in which ABCs are kept.

[44] Section 11 of the Wild Animal Conservation and Protection Act, 2019.
[45] Section 76 of the Wild Animal Conservation and Protection Act, 2019.
[46] Section 79 of the Wild Animal Conservation and Protection Act, 2019.
[47] INR 25,000 original source, converted on 16 September 2025
[48] INR 100,000 original source, converted on 16 September 2025



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While strong legislation and proportionate penalties provide a critical foundation for addressing illegal markets, much of their deterrent effect depends on consistent enforcement. The UNODC (2018) noted that the impact of strong penalties is defined by their practical application, underscoring the need for well-empowered and properly equipped enforcement agencies. Beyond disrupting and preventing crime, active enforcement also generates valuable data on trafficking dynamics, which can inform proactive planning and intelligence-led responses.

CITES advances a number of cross-cutting measures for effective enforcement in relation to the Convention. Two important guiding documents for general enforcement actions are:

- **Conf. 11.3 (Rev. CoP19) Compliance and enforcement**
- **Conf. 17.6 (Rev.CoP19) Prohibiting, preventing, detecting and countering corruption, which facilitates activities conducted in violation of the Convention**

These Resolutions, among other things, recognise the fundamental importance of empowering national enforcement agencies, addressing corruption, and establishing international cooperation channels including through active coordination between CITES and crime-related Conventions such as the UNTOC and the United Nations Convention against Corruption (UNCAC). Additionally, specific provisions and guidance applicable to the trade of ABCs are found in their dedicated Resolutions and Decisions, and the BCTF Outcome Document. An overview of these can be found in Annex III.

As criminal networks involved in the trade of ABCs evolve in scale and complexity, so must the strategies used to counter them. Recognising this, CITES Decisions and Resolutions increasingly encourage Parties to adopt sophisticated enforcement methods, such as intelligence-led approaches and financial investigations, that are typical for other types of serious crime. These approaches are essential for addressing the transnational, organised, and covert nature of wildlife trafficking and for supporting the prosecution and disruption of TOCs (UNODC, 2018; UNODC, 2024).

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3.1 LAW ENFORCEMENT MEASURES REVIEW

INCREASED CAPACITY AND SOPHISTICATED INVESTIGATIVE TECHNIQUES

CITES Resolution Conf. 12.5 (Rev. CoP19) invites Parties to "introduce innovative enforcement methods, such as anti-money laundering approaches, forensic analytical techniques, intelligence-led enforcement". These techniques have been conventionally promoted and used in addressing other forms of serious crimes, as outlined in international instruments such as the UNTOC and UNCAC. However, their application to wildlife crime enforcement has been historically limited (UNODC, 2017; ECOFEL 2021; WJC, 2025b), with several Parties continuing to face persistent structural and operational challenges.

Enforcement in Range States

The active involvement of resourceful and adaptive criminal networks in this trade has been widely documented (UNODC, 2019; Anagnostou, 2021; Pickles et al. 2025). Investigations by the WJC into the illegal tiger trade over the past nine years have found that organised crime networks operating in Lao PDR, Thailand and Viet Nam are driving the supply and trade of tigers throughout Southeast Asia. These networks have been found to conduct regular transactions to maintain an on-going supply of tigers and tiger parts, which are sourced primarily from captive breeding facilities located within the region and further afield (WJC, 2022).

Yet Parties in this region continue to face limitations hindering effective enforcement responses. Lao PDR has reported ongoing capacity issues, including resource constraints and insufficient training for enforcement personnel (SC78 Doc. 43.1). At the same time the Party has been repeatedly recognised as an important supplier of tigers catering to Chinese demand (CoP18 Doc. 71.1). Over the last decade, a large amount of financial aid has been made available to Lao PDR inter alia to combat illegal trade in wildlife (e.g., World Bank, 2015). However, the Secretariat's report at SC78 notes that Lao PDR has primarily reported on capacity-building activities, with limited information on on-the-ground cooperation mechanisms, national and regional actions, or the impacts of these activities (SC78 Doc. 33.8). This situation may at least be in part responsible for the extirpation of tigers in the country, as studies suggest that inconsistent fines and low convictions related to the poaching of this species undermines advancements in community enforcement (Ockerman et al. 2023).

National agencies have reportedly struggled with the identification of illegal specimens, particularly when encountering parts and derivatives in trade. In accordance with CITES Res. Conf. 9.6, all products marked or labelled as containing ABCs (i.e., CITES Appendix I species) should be treated as Appendix I specimens. In Thailand, products being marketed as tiger bone glue have been reported to be sold by licensed captive tiger facilities (EIA, 2020 b) despite the WACPA incorporating the CITES readily recognisable standard in its definition of "product from a carcass of a wild animal".[49] During SC78, Viet Nam also reported that enforcement officers often lack species identification skills needed to seize illegal wildlife consignments at point of interception (SC78 Doc. 43.1), while traffickers increasingly employ more advanced concealment strategies. While ongoing training for enforcement officials on species identification and CITES implementation was also reported, this lack of capacity undermines the practical application of legislative measures.

In terms of forensic analysis, range States now have access to DNA-based species identification, either in-country or through agreement with neighbouring country laboratories or mobile laboratory services. Species identification addresses the majority of prosecutorial questions associated with seizures. Beyond species identification, DNA profiles can be used in individual identification for tracing the source of seized tiger parts to their origin, and in parentage verification to examine captive breeding claims.

Several range States have reported targeted efforts to build tiger DNA profiling systems and associated reference databases. India, for instance, highlighted its work through the National Tiger Conservation Authority and the Wildlife Institute of India in genetic research of tigers (SC78 Doc. 43.1). Thailand further reported using genetic analysis and stripe-patterns information to revoke one zoo's permits and initiated legal action for the illegal possession of tigers (SC77 Doc. 41.1). Malaysia, Viet Nam, Thailand, and Lao PDR have co-developed TigerBase, which serves as a standardised DNA registration system to support enforcement and compliance testing of captive tiger facilities (Ewart et al. 2025). TigerBase comprises a database of individual DNA profiles linked to the tigers from which they were derived via stripe pattern photos and can be used to trace a seized tiger part to captive origin and test the authenticity of captive breeding claims (e.g., to detect laundering of cubs from the wild or from different captive facility).

[49] Section 2(7) of the Wild Animal Conservation and Protection Act, 2019.

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Enforcement in Non-Range States

Non-range Parties have also been observed to play a significant role in the trade of ABCs through their captive breeding operations and have therefore been requested to address their involvement in the international trade perpetuating demand. For instance, the European Commission has recently published guidance on the export, re-export, and intra-EU trade of captive-born and bred live tigers, their parts, and derivatives (EU, 2023), following evidence of the involvement of the EU as an exporter of captive-bred tigers for commercial purposes (Musing, 2020). In this region, central national registers providing information on facilities keeping tigers and enabling traceability do not exist, with the Czech Republic being the only known exception (Ibid.). The national *TIGRIS ID* project has been recognised by CITES Decision 19.190 (c), with several Parties expressing interest in engaging with the project (e.g., South Africa and the United States) or reporting on past and continued collaborations (e.g., Slovakia) (SC77 Doc. 41.1; SC78 Doc. 43.1).
The United States' National Fish and Wildlife Forensic Laboratory (NFWFL), which facilitates species and individual identification and collaborates with domestic and international forensic experts, has expressed interest in working with the Czech authorities and other big cat working groups to explore joint tiger identification approaches (SC77 Doc.41.1). In the implementation of specialised enforcement techniques, the Party has further highlighted the enforcement model applied through the US Fish and Wildlife Service's (USFWS) Office of Law Enforcement (OLE), which integrates the efforts of special agents, wildlife inspectors, intelligence analysts, forensic scientists, information technology specialists, and other professionals (SC78 Doc.43.2). In 2018, an investigation led by the OLE resulted in a nine month prison sentence, followed by a year of supervised release for the trafficking of tiger and lion parts (DOJ, 2018).

Enforcement against Online Trade

One persistent and escalating challenge noted by previous ABC reviews is the role of online trade (SC70 Doc. 51; SC75 Doc.13). CITES Res. Conf. 11.3 addresses and makes recommendations in this regard (see Annex IV). The last ABC review also highlighted that CITES Parties increased their engagement with social media and e-commerce platforms (COP18 Doc. 71.1). While no Parties have reported an active engagement with such companies at CITES fora, relevant initiatives can be observed through other sources. In China, with the support of WWF, TRAFFIC, International Fund for Animal Welfare (IFAW) and China Wildlife Conservation Association (CWCA), the Coalition to End Wildlife Trafficking Online was launched in Beijing in 2018 by Chinese internet giants Alibaba, Baidu and Tencent. Membership has since gone global, doubling in size to more than 40 companies covering more than 50 digital platforms across Africa, Asia, Europe and the Americas (WWF, N.D. b). China also reported addressing online trade through its Inter-departmental CITES Enforcement Coordination Group and inter-ministerial mechanisms for online market supervision (SC78 Doc.73.1). In India, the Wildlife Trust of India (WTI) has created a Tiger bot, which gathers information and intelligence based on predetermined key words and is learning to identify images, allowing it to find information on the sale of illegal tiger products online with an 85% accuracy rate (WWF, 2022).

Reporting on Operational Outcomes

At CITES CoP20, range States such as Cambodia, Indonesia, Lao PDR, Pakistan, Viet Nam, and Yemen are reporting limited enforcement capacity and ongoing concerns of illegal trade (CoP20 Doc.77.1). Notably, no Parties reported to CITES on the use of intelligence-led investigations. Overall, despite some examples of progress, reporting on the operational use and measurable outcomes of specialised agencies and techniques in ABC-related investigations remains limited. While this may not necessarily reflect a lack of its application on the ground (as evidence of their use has been reported by other sources, e.g., **(see Indian Masterminds, 2025)**, the reporting of these successes to CITES remains important to measure and assess progress.

COLLABORATIVE INVESTIGATIONS, OPERATIONS, AND INFORMATION-SHARING

Strengthening inter-agency and cross-border collaboration remains a critical priority for the enforcement of ABC trade, particularly given the increasingly resourceful and adaptable nature of TOCs, and the need to prevent crime displacement to other jurisdictions with weaker enforcement or legal frameworks (WJC, 2022). Decisions 18.100 and 18.01 therefore encourage Parties to "pursue enforcement efforts to address this illegal trade, including through the initiation of joint investigations and operations aimed at addressing crime across the entire illegal supply chain" and to "strengthen law enforcement cooperation with their neighbouring Parties to target such illegal trade".

[50] including Alibaba, Baidu, eBay, Deine Tierwelt, Facebook, Google, TikTok and Tencent

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Regional cooperation

Considering that some markets in Lao PDR and Myanmar continue to be identified as hotspots of wildlife trade tourism mainly driven by Chinese tourists, it has been suggested that increased cooperation between these Parties' and Chinese authorities could help deter the cross-border movement of ABC commodities (SC70 Doc. 51). In 2022, Cambodia, Viet Nam, and Lao PDR held a conference attended by Chief Justices with the purpose of increasing law enforcement, prosecution, and conviction rates for wildlife crimes in the region (The Phnom Penh Post, 2022). In addition, Viet Nam's Department of Forest Protection (VnForest) has signed Memoranda of Understanding (MOU) with their counterparts in Cambodia and Lao PDR to collaborate on wildlife and forestry-related crimes (Environmental Agriculture, 2023; Vietnam Plus, 2024). Similarly, Thailand reported an ongoing process of formalising MoUs with Lao PDR and Malaysia to reinforce bilateral enforcement cooperation on big cat trade. However, to date, no joint coordinated enforcement action or prosecutions on ABCs have been reported by Parties in Southeast Asia. As such, these efforts need to be further monitored to evaluate their effectiveness in delivering tangible outcomes.

During SC78, several South Asian Parties reported on collaborative enforcement initiatives. India highlighted ongoing coordination with neighbouring countries Bangladesh, Bhutan, and Nepal to jointly monitor and disrupt cross-border trafficking networks (SC78 Doc. 43.1). As members of the South Asian Wildlife Enforcement Network (SAWEN), over 30 officials from these Parties and Sri Lanka participated in a training program seeking to enhance capacity and cooperation against wildlife crime in the region (WWF, 2024).

Recorded incidents of seizures may also be leveraged as an opportunity for broader regional cooperation. For instance, investigations into tiger trafficking in Southeast Asia have highlighted Malaysia as an important transit point (Reuters, 2022), with a prolific wildlife trafficker operating out of the Kuala Lumpur International Airport and trading in tiger cubs being recorded since 2017 (WJC, 2022). Today, the Malaysian airport continues to be involved in trafficking supply chains, noting a few detections of these activities. However, Indian airports have also detected a large number of illegal wildlife specimens arriving from Malaysia (Krishnasamy, 2025), suggesting that the route between these two countries may be systematically targeted by trafficking networks. This may present an opportunity for these two Parties to increasingly intensify cooperative approaches (Ibid.), potentially targeting networks operating between the ABC trade hotspots in South and Southeast Asia.

International Cooperation

At the international level, Operation Thunder (11 November – 4 December 2024), a global enforcement operation convening 138 countries and led by INTERPOL, resulted in the seizure of nearly 20,000 live animals, including 18 big cats (Interpol, 2025). It is unclear which of these big cats constitute ABCs and it is not yet known whether these seizures resulted in prosecutions or convictions. INTERPOL also reported at SC77 offering support to India and Nepal to map TOC networks and identify high-level targets. Regional Investigative Analytical Case Meetings (RIACM) were scheduled with these countries, as well as with Thailand and Lao PDR, to advance joint investigations. The United States, through its National Fish and Wildlife Forensic Laboratory (NFWFL), has also reported providing forensic analysis support to other CITES Parties, as well as Interpol's wildlife crime working group (SC77 Doc. 41.1). The USFWS International Affairs also funded projects in Central Asia, as well as capacity building in Nepal for enforcement and outreach across several species, including tigers (DOJ, 2024).

Inter-agency Coordination

At the national level, Resolution Conf. 12.5 *(Rev. CoP19)* also encourages Range States to ensure enforcement units and personnel receive relevant and effective support in, among other things, inter-agency liaison and cooperation, as well as to ensure anti-poaching teams are effectively resourced and intelligence is shared between relevant enforcement agencies. Several Parties have enacted legal mandates to empower inter-agency cooperation and coordination. For instance, Malaysia set up its Wildlife Crime Bureau in 2022, seeking to address, among other things, the trafficking of natural resources through inter-agency coordination (TRAFFIC, 2023). That same year, the Party also established the National Tiger Conservation Task Force (MyTTF), bringing a focus on multi-agency enforcement and other conservation actions to restore Malayan tiger populations (NST, 2022). In Viet Nam, the CITES Implementing Decree empowers multiple agencies to address wildlife trade violations and the Criminal Procedure Code allows forest rangers to conduct investigations. However, evaluations of this framework have concluded that coordination among relevant agencies (e.g., customs, forest protection agencies, investigation agencies, and

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people's procuracies) can be intensified (Vietnam Law Magazine, 2024). In China, under the Inter-Ministerial Office Against Illegal Wildlife Trade established in 2016 by China's State Council and chaired by the National Forestry and Grassland Administration (NFGA), 27 central-level agencies (from agriculture and customs to public security, transport and market regulation) and their local counterparts conduct joint investigations, operations and data exchanges. Annual tasking meetings, whole-of-government training, targeted research and coordinated enforcement campaigns create a whole-chain approach to detecting, disrupting and dismantling trafficking networks (WWF, N.D. b). Thailand's Department of National Parks is supported by a Wildlife Enforcement Network and a Wild Animal Conservation and Protection Commission. These coordination mechanisms facilitate inter-agency work among 13 national agencies, leading to joint investigations involving environmental agencies, police, and financial authorities (OECD, 2019; SC78 Doc.73.1). Similarly, India's WCCB has a mandate to coordinate efforts by different enforcement and government authorities, as well as to develop and disseminate actionable intelligence (WCCB, N.D.).

ADDRESSING CORRUPTION, MONEY LAUNDERING, AND ILLICIT FINANCIAL FLOWS

Res. Conf. 17.6 (Rev. CoP19) recognises the necessity to address corruption and illicit financial flows enabling wildlife trafficking. The BCTF Outcome Document builds on this by describing the value of risk assessments and implementing anti-corruption and AML measures. At the same time, various studies and investigations have documented the ways in which corruption and financial crime enable transnational wildlife trafficking (UNODC, 2024, WWF, 2022; WJC, 2023). Wildlife trafficking networks rely on specialised actors, including brokers and traffickers which are enabled by complex financial infrastructures (Wingard et al. 2025). Uncovering corruption practices and financial crime are key in understanding and addressing the most critical enablers of these crimes.

Organised Crime in the Golden Triangle

In Southeast Asia, casinos operating within Special Economic Zones *(SEZs)* have emerged as facilitators of money laundering and wildlife trafficking, with SEZs in Lao PDR and Myanmar identified as significant nodes in the trafficking of tiger parts and other illicit commodities (UNODC, 2019). For instance, captive facilities in the *Golden Triangle SEZ* have been directly linked to the illegal trade of tigers and other wildlife (EIA, 2022). In this area, the illegal and unregulated nature of wildlife trade operations, as well as other forms of illegal activities (including cybercrimes, drug smuggling, modern slavery, and human trafficking) have been widely documented (Not for sale, 2025). In response, the United States had imposed financial sanctions on Zhao Wei transnational criminal organisation (TCO), which operated within these zones, for their involvement in various criminal activities, including the trafficking of tigers and other endangered species (Department of Treasury, 2018). Canada and the United Kingdom have similarly sanctioned the Zhao Wei TCO under human rights legislation (Office of Financial Sanctions, 2023; Foreign Interference Commission, 2023).

Despite these actions, recent investigations suggest illegal tiger facilities have expanded in this area since 2015 (EIA, 2022), underscoring the need for more high-level enforcement intervention by Parties in the *SEZ* (Van Uhm & Zhang, 2022). The previous review identified tourist markets associated with the IWT including ABC specimens as an issue in Lao PDR, particularly in the *Golden Triangle SEZ* (CoP18 Doc. 71.1). This situation appears to have deteriorated further, with a recent report indicating that thousands of Chinese tourists have been visiting at least 18 large-scale shopping sites in Lao PDR offering a range of illegal wildlife products, including tiger parts, as part of organised tour groups (GITOC, 2025).

IIn 2023, the Asia Pacific Group (APG) of the Financial Action Task Force on Money Laundering identified significant wildlife crime risks in Lao PDR, including the farming of tigers and other exotic species, the trafficking of animal parts and products, and indications that Laotian citizens receive substantial criminal proceeds (APG, 2023). The APG further noted that Lao PDR had not demonstrated active cross-border cooperation to combat wildlife trafficking, including illegal tiger farms, and that authorities had not identified potential criminal beneficiaries linked to Laotian businesses (Ibid.). In February 2025, Lao PDR committed to implementing measures under its Financial Action Task Force action plan, including enhancing risk-based

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supervision of casinos and other reporting entities in SEZs, and increasing money-laundering investigations and prosecutions, with a focus on transnational crimes requiring international cooperation. (FATF, 2025)..

Enabling financial investigations into ABC trade

India and Thailand provide examples on the use of AML legislation to prosecute instances of tiger trafficking. In India, WCCB investigations have revealed links between tiger trafficking and financial crime, resulting in further arrests, investigations, and convictions under the *Prevention of Money Laundering Act* (FATF, 2020; PIB, 2023). In Thailand, the use of AML legislation resulted in one of the biggest asset forfeitures against wildlife trafficking networks (SC70 Doc.51). Financial investigations by the Party have uncovered evidence of ancillary crimes, such as money laundering, corruption, and tax evasion, which can result in higher penalties to wildlife offenders (GITOC, 2021).

At SC77, South Africa also reported employing AML techniques and intelligence-led enforcement. In 2019, the Party created the Anti-Money Laundering Integrated Task Force (SAMLIT), which includes its Treasury, Financial Intelligence Centre, and Directorate for Priority Crime Investigation. SAMLIT is intended to support resource and information sharing to detect, prevent, and disrupt financial crimes, including those associated with IWT (UFW, 2022). However, to date investigations related to tigers or other ABCs have been reported by the agency (SAMLIT, 2023) despite reports of the Party being implicated in international tiger trade and suspicions of the involvement of criminal networks in this trade (EIA, 2018; Four Paws, 2024).

Malaysia's *Anti-Money Laundering Act,* explicitly covers wildlife-related offences, including sale, purchase, import, export, re-export, capture, and breeding of protected species. The Party's Wildlife Crime Bureau, which was established with the commitment to conserve the Malaysian tiger, has affirmed to use all available tools, including AML, to combat IWT (TRAFFIC, 2023).

3.2 CASE STUDY ON LAW ENFORCEMENT MEASURES

Case study 8: Sentencing repeat offenders, Indonesia.

Maskur, a trader from Central Aceh, has been convicted three times for his involvement in the illegal trade of Sumatran tiger parts. His first arrest took place in January 2013, when police caught him attempting to sell a tiger skin after investigators found that he had skinned a tiger and kept its bones. It was reported that the suspect engaged in IWT as a side business. The Takengon District Court sentenced him to one year in prison and a fine of USD 596[51].

He was apprehended again in March 2016, when police found him in possession of two tiger skins and bones. It was discovered that Maskur had poisoned two tiger cubs in his garden and sold their parts to a buyer. The Bireuen District Court sentenced Maskur to three years in prison and a fine of USD 2,982[52]. This constituted an increase on the prosecutor's request, justified by his status as a repeat offender. This decision marked one of the toughest punishments for wildlife crime in Aceh at the time.

In March, 2025, Maskur was arrested once again, this time with an associate, after acquiring two tiger cub skins from hunters. The case involved a wider group of offenders: three hunters who had trapped and killed a tiger, and Maskur and his associate who acted as buyers and traders. In September 2025, the Takengon District Court sentenced the hunters and Maskur's associate to three years in prison and fines of USD 11,928[53]. Maskur, identified as the key repeat offender, received the heaviest penalty: five years in prison in addition to the same fine. The court also ordered the confiscated tiger parts to be handed over to the Aceh Natural Resources Conservation Agency and the tools used in the crime to be destroyed. This outcome was achieved with the support of the Central Aceh Police Criminal Investigation Unit and the Central Aceh District Attorney's Office (Hanafiah, 2025).

This case illustrates the progress made in recent years. The use of advanced criminal investigations and sentences more closely aligned with UNTOC standards would have been unlikely in the past, and their application here marks an important step forward. At the same time, the case highlights areas where further progress is possible. The repeat offending of individuals such as Maskur suggests that penalties, while stronger than before, may not yet always serve as a sufficient deterrent. Given the high market value of tigers and tiger products, there is scope for imposing higher financial penalties on repeat and potentially high-level offenders. Complementary financial investigations could also strengthen outcomes by shedding light on the profits generated, the scale of operations, and potential links to associates both domestically and internationally.

[51] Rp10 million original source, converted on 26 September 2025
[52] Rp50 million original source, converted on 26 September 2025
[53] Rp200 million original source, converted on 26 September 2025

3.3 RECOMMENDATIONS ON LAW ENFORCEMENT MEASURES

Measure: **"All Parties to apply strict enforcement controls and to be vigilant in addressing illegal trade in Asian big cat specimens and any associated illegal trade in specimens of other big cat species" Resolution Conf. 12.5 (Rev. CoP19)**

Challenge: Despite positive developments, several Parties, including Cambodia, Lao PDR, and Viet Nam, report limited enforcement capacity. Reviews at CoP18 highlighted Cambodia as a Party of concern for leopard trade, with poaching contributing to population declines after tiger populations were lost. In Lao PDR, poaching has similarly driven tiger extirpations, and limited capacity continues to hinder effective enforcement despite ongoing support.

In Myanmar, the inability to conduct recent physical market surveys means illegal trade in big cats, especially clouded leopards, may persist at previously recorded levels. Unlike tigers, authorities have not yet investigated online trade for clouded leopards, the country's most commonly traded big cat.

Opportunity: This illustrates how limited enforcement can undermine the impact of legal, deterrent, and community measures. By empowering, training, and allocating resources to national agencies, Parties could more rapidly see the benefits of these measures. Parties should also be encouraged to report more comprehensively on operational outcomes and criminal justice proceedings.

Intelligence-led enforcement is essential not only for detecting and punishing offenders but also for generating data critical to understanding and preventing crime. In countries with few reported seizures but where other signs of trafficking exist, building on existing knowledge through stricter controls, carrying out comprehensive market surveys, and investigating ABC trade could bolster enforcement outcomes.

Measure: **"All Parties, especially range and consumer States, to introduce innovative enforcement methods, for example anti-money laundering approaches, forensic analytical techniques, intelligence-led enforcement and working with internet and transportation companies, and, as a matter of priority, strengthen enforcement efforts in key border regions, and develop or improve implementation of regional enforcement networks" Resolution Conf. 12.5 (Rev. CoP19)**

Good Practice: In recent years, examples of intelligence-led and money laundering investigations triggered through ABC offences have been recorded in Thailand, India, and the United States. Other Parties, such as Malaysia and South Africa, have empowered relevant wildlife agencies to conduct such investigations.

Challenge: Reporting to CITES on the outcomes of the use of specialised, advanced or financial investigations in ABC cases remains limited. No such cases were submitted at the SC78, which may suggest a gap in operational implementation of financial and anti-corruption measures in the enforcement of ABC-related cases.

Opportunity: A more consistent use of so-called innovative enforcement methods, such as financial investigations, intelligence analysis, and undercover investigations, can be crucial for uncovering the structure of trafficking networks, identifying key actors, and disrupting operations beyond replaceable poachers or low-level couriers. Greater emphasis on these methods, particularly when paired with AML and online investigations, could help track financial flows and target high-level traffickers and their criminal assets.

Beyond enforcement outcomes, the application of such methodologies can also serve as a deterrent. Demonstrating that authorities are empowered to investigate the financial and organisational backbone of trafficking networks, and their modus operandi signals a greater risk to offenders, reducing the perception of impunity that often drives involvement in the trade.

Adopting an intelligence-led approach allows Parties to focus limited resources on the most prolific criminal activity, enhancing both effectiveness and efficiency. Strengthening intelligence-led enforcement and expanding the use of specialised investigative techniques provides a strategic opportunity to improve detection and prosecution of ABC-related crimes, while also supporting long-term efforts to dismantle TOC.

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***Measure:* "Parties affected by illegal trade in Asian big cat specimens, in particular Parties identified in document CoP18 Doc. 71.1, are encouraged (...) pursue enforcement efforts to address this illegal trade, including through the initiation of joint investigations and operations aimed at halting the members of organized crime networks across the entire illegal trade chain." Decision 18.100**

Good Practice: The conviction of a prolific trafficker from Nghe An province, Viet Nam marked an important step. Challenge: Significant illegal trade activity continues to be recorded in well-documented hotspots by previous reviews, such as the Golden Triangle SEZ and border areas between Southeast Asia and China. In Viet Nam, reports suggest that the Nghe An province continues to hold large numbers of tigers, many of which are suspected to have originated from facilities in Lao PDR .

These persistent hubs highlight opportunities for more targeted enforcement, particularly through international cooperation and proactive monitoring. Lao PDR appears to continue to play a central role in the trafficking of ABCs and other wildlife in the greater Mekong region as a source (captive), transit and point of consumption. Despite much scrutiny and financial assistance over a period of time, it would seem that significant actions on legislation, enforcement and international collaboration remain to be taken to address its role in the illegal trade of ABCs and other IWT.

Opportunity: Given the scale of activity in this region, multi-agency collaboration and cross-border coordination are essential to addressing entrenched trafficking networks. Continued and coordinated action between Viet Nam and Lao PDR could be critical in addressing the persistent trade in Nghe An. The use of intelligence-led enforcement in ABC cases provides an opportunity in this regard. While several Parties have provided such investigative powers through their legal frameworks, establishing intelligence-sharing mechanisms would enable more coordinated responses targeting high level criminals.

Similar opportunities exist along trafficking routes between South and Southeast Asia. Routes passing through Malaysia and India highlight the value of strengthening airport and border controls, alongside enhanced intelligence-sharing between agencies. Such measures not only improve detection of individual smuggling incidents but also help identify more organised elements. By linking seizures across borders, targeting high-risk shipments, and sharing emerging intelligence, authorities can prioritise limited resources more effectively, disrupt organised networks, and prevent the consolidation of illegal trade routes.

***Measure:* "All governments and intergovernmental organizations, international aid agencies, and non-governmental organizations to provide, as a matter of urgency, funds and other assistance to stop illegal trade in specimens of Asian big cat species, and to ensure the long-term survival of the Asian big cat species in the wild" Resolution 12.5**

Good practice: The United States has played a significant role in funding conservation and IWT initiatives globally, through its USFWS and Agency for International Development (USAID). At SC77, it reported supporting international efforts for tiger conservation and identification, through its USFWS' Rhinoceros and Tiger Conservation Fund and the NFWFL. Furthermore, in recent years, it has been one of the world's biggest funders of conservation projects, with USAID providing around USD 375.4 million in 2023 alone (Mukpo, 2025). Between 2018 and 2023, the country provided nearly half (47%) of donor investment in combating IWT (World Bank, 2025). These efforts have provided critical support for tiger conservation, demand reduction, and capacity-building initiatives in range and consumer countries.

Similarly, the United Kingdom, in response to CITES notification 2023/091, has granted funding for projects seeking to address the illegal trade in big cats. These include the funding of relevant activities by the CITES Secretariat, the International Consortium on Combating Wildlife Crime (ICCWC), and demand reduction projects (SC77 Doc. 41.1).

Challenge: Recent changes in U.S. policy direction may affect the continuity of such programmes. For instance, it has been reported that the Asian Rhinoceros and Tiger Conservation Fund was suspended in line with an Executive Order (WCA, 2025), and foreseen budget adjustments suggest a shift in focus toward domestic rather than international species (DOI, 2025). These changes have already led to a scale-back of conservation activities internationally (Mukpo, 2025). Other major international donors to foreign development programmes, such as the United Kingdom, Netherlands, and France, have also confirmed forecasts of budget reductions for these initiatives (BCG, 2025). Given the scale of contributions by these Parties in recent years, the potential reduction in resources and support presents a challenge for ongoing international cooperation and capacity-building efforts to address the illegal trade in ABCs.

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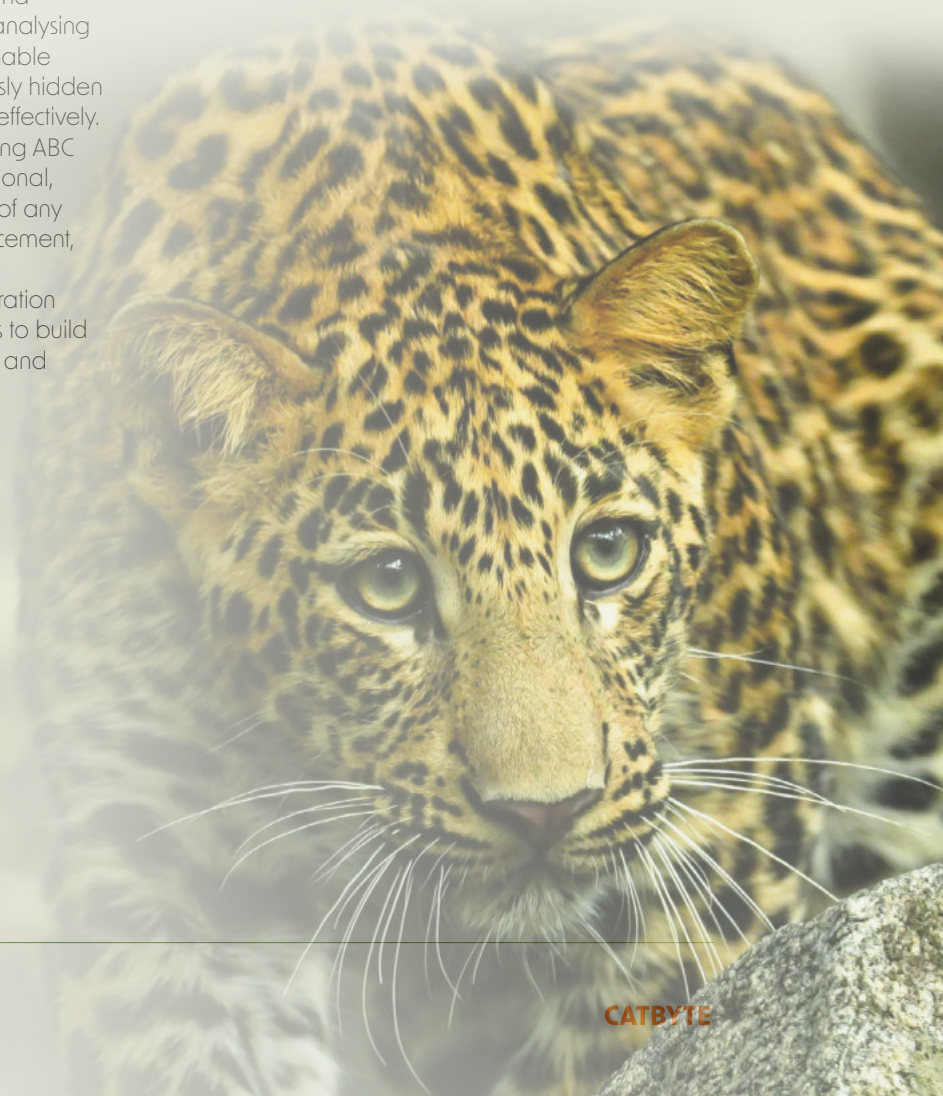
Opportunity: CITES Parties should explore alternative sources of funding and reassess Party's commitments to ensure continuity of programmes, particularly those focused on enforcement, capacity development, and demand reduction in affected regions.

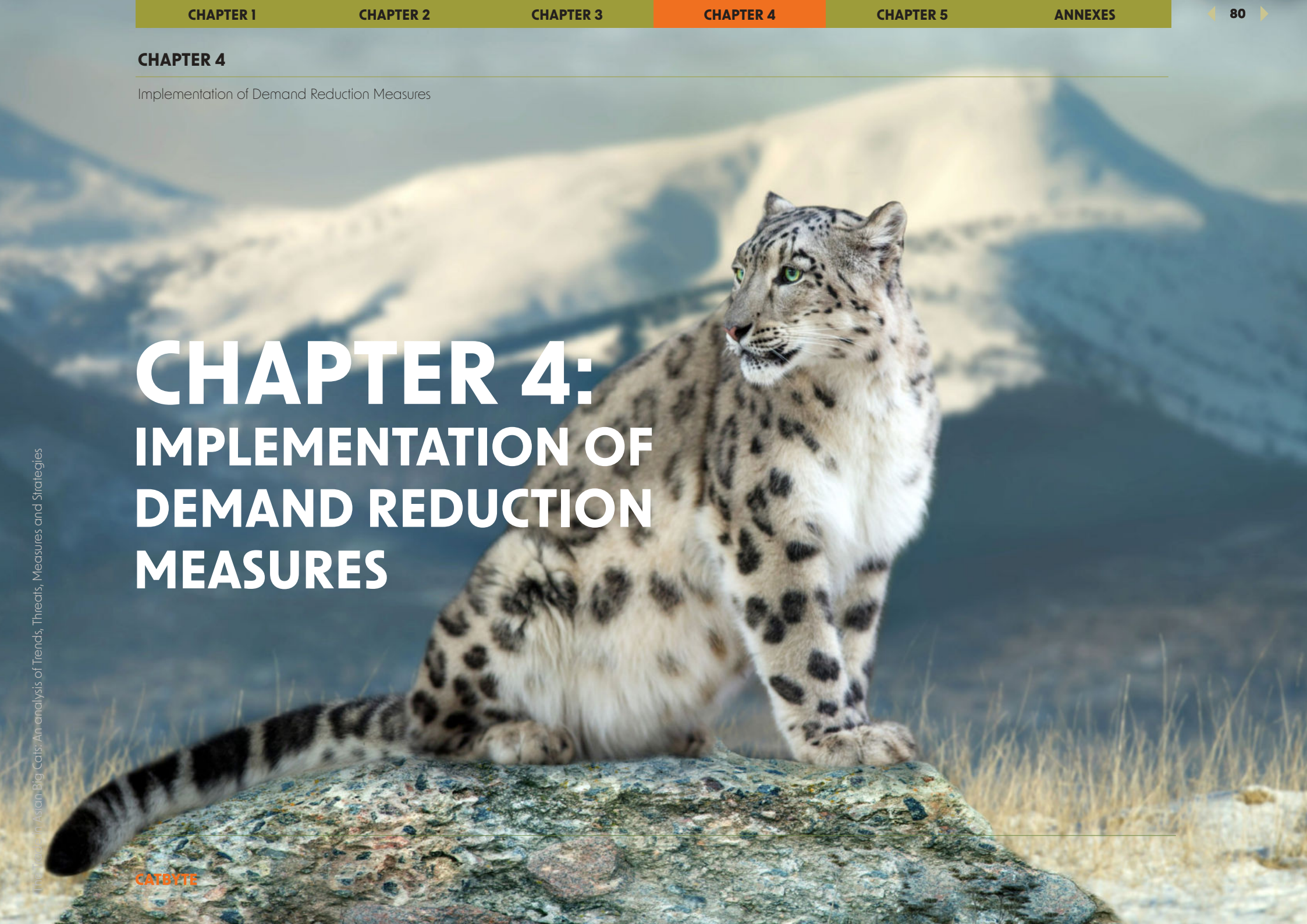
***Measure:* "Enforcement agencies in range and consumer States of the tiger and other Asian big cat species establish cooperative bilateral and multilateral arrangements, especially for the management of shared wildlife species and protected habitats with common boundaries, in order to achieve more effective control of illegal international trade in specimens of Asian big cat species" Resolution Conf. 12.5 (Rev. CoP19)**
Good practice: At recent CITES Standing Committee meetings, several Parties have reported regional meetings and the establishment of mechanisms to improve cooperation. These efforts are key to fostering cross-border responses, particularly in Southeast Asia and Central Asia, where transnational networks are active.

Opportunity: While developments seeking to increase regional collaboration by Parties in these regions are positive, their effectiveness depends on translating discussions and agreements into measurable outcomes. Measure: "Secretariat to work with ICCWC partners to promote increased awareness amongst the law enforcement community of the serious nature and impact of illegal trade in Asian big cat species, and to improve cooperation and a multidisciplinary approach in the detection, investigation and prosecution of crimes related to these species" Resolution Conf. 12.5 (Rev. CoP19)

Good Practice: Operation Thunder led by INTERPOL across 138 countries demonstrates the effectiveness of large-scale, centrally coordinated international cooperation, combining intelligence sharing, operational planning, and enforcement action.

Opportunity: RIACMs offered through INTERPOL provide range States with a valuable platform to coordinate investigations, share intelligence, and identify criminal linkages. By centralising and analysing intelligence from multiple countries, RIACMs enable authorities to detect patterns, uncover previously hidden connections, and target high-risk actors more effectively. These meetings are fundamental for addressing ABC trade, which is often cross border and international, frequently extending beyond the jurisdictions of any single country. By bringing together law enforcement, analysts, and relevant agencies from affected countries, RIACMs strengthen regional collaboration and analytical capacity, enabling participants to build a clearer picture of trafficking networks, routes, and facilitators.





CHAPTER 4: IMPLEMENTATION OF DEMAND REDUCTION MEASURES

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Implementation of Demand Reduction Measures

Reducing demand for ABCs, their parts, and their derivatives remains one of the most effective long-term strategies to end their exploitation. CITES has implemented various measures to address demand and create public awareness about the negative impacts of IWT, for instance through:

- **Resolution Conf. 17.4 (Rev.CoP19) on Demand reduction strategies to combat illegal trade in CITES-listed species**

This Resolution urges Parties to make full use of the CITES guidance on demand reduction strategies to combat illegal trade in CITES-listed species. This document provides a five-step approach to achieving behaviour change of potential consumers of illegal wildlife, including ABCs (CITES, 2021). Similarly, TRAFFIC, together with the Behavioural Insights Team (BIT) published a report outlining good practice guidelines for the preparation of effective messaging for demand reduction and behavioural change campaigns on wildlife trafficking (TRAFFIC, 2019). Additional to these general measures and guidance documents, dedicated ABC Resolutions and Decisions, as well as the BCTF Outcome Document provide specific measures and guidance applicable to these species. An overview of these can be found in Annex V.

In the context of CITES, demand reduction can be defined as the "efforts to discourage and prevent the use or consumption of illegally acquired wild animals and plants that are included in the CITES Appendices, especially through behaviour change interventions" (CITES, N.D.). For these efforts to be effective, governments should assume a leadership role by ensuring that CITES-implementing legislation is effective and enforced and by securing resources to conduct initiatives that educate and raise awareness of the relevant laws and conservation needs of these species (CITES, 2022). While this can be done by communicating to broad audiences to generate knowledge among consumer groups, it can also take the form of behavioural change communications, which are more targeted and seek to reduce or eliminate specific motivations in specific target audiences by engaging through those that influence them (TRAFFIC, 2018). Several Parties and NGOs have undertaken demand reduction and awareness raising initiatives aimed at curbing the use of ABC parts and derivatives, particularly in luxury goods and traditional medicine. Despite these efforts, demand continues to be documented. As such, effective behaviour change may require a greater focus on well-researched, targeted, and specialist-led initiatives, combined with legislative measures to close commercial markets promoting consumption of ABC products.

4.1 DEMAND REDUCTION MEASURES REVIEW

Targeted Awareness and Education Campaigns

Resolution Conf. 12.5 (Rev. CoP19) calls for appropriate education and awareness campaigns directed at targeted groups (including rural and urban communities) on the significance of ABCs as well as to eliminate illegal trade in and use of ABC products. CoP18 Inf. 4 further emphasises the need for well-targeted, insight-led and evidence-based demand reduction strategies (CITES, 2021). This means demand reduction actions must be targeted to specific motivations, audiences, behaviours, and species (Ibid.). In line with these measures, some Parties have reported national initiatives aimed at raising public awareness and reducing demand for ABC specimens and products.

Targeting national cultural drivers

At SC77, South Africa, Thailand and Viet Nam were encouraged to "develop educational materials and displays to enhance the public education and awareness raising value associated with the display of tigers" (SC77 Doc. 41.2). In response, Thailand has reported carrying out a series of educational and cultural outreach activities. These include awareness campaigns in partnership with the NGO WildAid, which distributed wildlife legislation materials to monks and nuns, in order to address cultural drivers of demand for tiger parts and ivory (CoP20 Doc. 77.1). In 2018, a social research company conducted consumer research of rhino and tiger buyers and receivers, identifying and grouping motivations to inform consequent behaviour change campaigns in the country (CITES, 2021). The Party also continues to promote tiger conservation through public engagement events (such as World Tiger Day) using interactive platforms to broaden outreach (CoP20 Doc. 77.1). As part of the "Mercy is power" campaign under the GEF-6, Thailand has also encouraged its citizens to take a pledge against purchasing and owning ivory and tiger amulets (TRAFFIC, 2021).

In Nepal, the government's Snow Leopard Conservation Action Plan, 2024-2030 (SLCAP), encourages working with faith leaders, notably traditional medicine practitioners, on diverse aspects of conservation, including increasing tolerance to promote coexistence as well as to reduce wildlife crimes. In parallel, documenting knowledge on sustainable alternatives to wildlife parts in traditional medicines (Ghimire *et al.* 2021), has laid the foundation for strategic engagement with these stakeholders and their beneficiaries. Viet Nam has reported integrating tiger conservation into school curricula through a

[54] A global social purpose company that applies behavioural insights to inform policy, improve services, and help people to make better choices for themselves

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collaboration between its Ministry of Education and Humane Society International (CoP20 Doc. 77.1). This initiative targets students with early-stage conservation messaging, aiming to shape attitudes over the long term.

China has also reported conducting annual public awareness campaigns and themed initiatives coinciding with events such as World Wildlife Day and Wildlife Protection Month to raise awareness about wildlife protection and illegal trade (SC77 Doc. 41.1). In the country, the China Wildlife Conservation Association (CWCA) has worked with government agencies, academic institutions, and public outreach organisations to develop their approaches to Social and Behaviour Change (SBC). As a result, training has been provided to 400 participants (both in-person and online) on how to design impactful messaging and apply behaviour change principles (CITES, 2021).

Addressing international demand

India, under the *Project Tiger scheme,* has implemented national outreach activities. These campaigns seek to shift attitudes and reduce international demand through targeted communication (SC77 Doc. 43.1). USAID also performed two phases of a Digital Deterrence Campaign in 2018-2019 and 2019-2020 aimed for foreign and local tourists, children, and the general public. Phase I of this campaign was strategically used to inform Phase II on demographic profiles of target audiences (TRAFFIC, 2020). Furthermore, in 2021, USAID, in partnership with the Association of South Asian Nations (ASEAN), launched the Reducing Demand for Wildlife (RDW) programme, which included campaigns such as No Ivory, No Tiger Amulets. Across Thailand and China, these initiatives contributed to a drop in the proportion of consumers intending to purchase wildlife products (elephant, pangolin, rhino, and tiger) from 33% to 25%. The programme integrated social media tools including Instagram comic competitions and Facebook Live events essentially to reach broader audiences at lower costs, complementing traditional outreach methods. To promote sustained impact, USAID trained community members in behaviour change techniques for demand reduction. In January 2023, Thai spiritual leaders applied this training to launch a campaign viewed over three million times, with post-campaign surveys showing 73% of respondents pledging not to buy ivory or tiger products in the future (DOS, 2025).

WORKING WITH RELEVANT COMMUNITIES AND INDUSTRIES

CITES Resolution Conf. 17.4 (Rev. CoP19) urges consumer states to develop evidence-based demand reduction strategies that include collaboration with specialists in behaviour change, social marketing, and communications. The Resolution also highlights the need for collaboration with traditional medicine communities and industries. CITES (2021) guidelines further emphasise that campaigns are most successful when led from relevant communities. This approach should seek to embed inclusive messaging, not only by positioning itself within popular messages, but by exploring messengers and mechanisms that effectively engage multiple stakeholders.

Communities

Demand reduction and behaviour change are challenging endeavours. Yet, promising examples of impactful campaigns in shifting practices and perspectives have been observed. For instance, the Furs for Life and Saving Spots campaigns achieved meaningful reductions in the use of leopard skins in religious ceremonies (Panthera, N.D.). While this example was only applicable in the African context, it demonstrated the impact of working with communities to deliver culturally sensitive, scalable solutions.
In Nepal, efforts have been initiated to engage with faith leaders for contextual adaptations of traditional practices to current needs. Nepal Buddhist Federation (NBF), through WWF support have launched their 10-year Faith Plan for Environment, 2024-34, (NBF, 2024) that prioritizes phasing out endangered wildlife parts in the traditional *Sowa Rigpa* ('Science of Healing'). Noting the criticality of such adaptation for the sustenance of this age-old practice, WWF has also partnered with Sowa Rigpa Association Nepal an institution promoting the practice by working with traditionally trained Amchis (traditional medicine practitioners) as well as offering formal degrees on Sowa Rigpa. Through these partnerships, behaviour change outreach including capacitating Amchis on use of sustainable alternatives to wildlife parts, have been initiated. As directed by the CITES (2021) guidance, these campaigns demonstrate an understanding of the target group's motivations, while providing alternative behavioural options that align with their practices and group identity, potentially driving the impact of these initiatives.

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Relevant Industries

Efforts to engage with relevant industries can also be observed in the 2022 WildAid China "Say No to Shipping Illegal Wildlife Products" PSA and billboards campaign, launched in partnership with China Wildlife Conservation Association and China Express Association, the largest organisation in the country's express delivery industry. The campaign sought to raise awareness among shipping enterprises and consumers regarding existing bans and regulations on the shipping of protected wildlife products, including tiger bone. Through a notice issued by the State Post Bureau in 2020, couriers are required to inspect delivery items and, when finding protected wildlife products, to stop delivery and report it to the authorities. The PSA and billboards were displayed on well-known shipping companies to make these regulations known, while disseminating materials on social networks to deter future purchases by potential consumers (WildAid, 2022). This campaign also demonstrates good messaging practices raised by CITES (2021), as it breaks down the actions that have been deemed illegal by the government, while highlighting the short-term, individual consequences of such actions.

In Viet Nam, with support from the USAID funded Saving Threatened Wildlife and Saving Species projects, WWF and TRAFFIC engaged with a wide range of actors to raise awareness of the illegal trade of tigers and tiger parts. Specifically, traditional medicine practitioners took part in several communication campaigns to urge users to consider alternatives to tiger bone glue. These campaigns were aired around the Tet holiday (Viet Nam's lunar new year) to increase their reach and effectiveness. Additionally, Buddhist-based messages were placed at temples and places of worship throughout the countries to dissuade the public from using tiger products. Lastly, transportation and online-sale companies were engaged to sign pledges of support to not allow for the sales and transhipment of illegal wildlife products, including tiger products, on their platforms (WWF, N.D. c).

ADDRESSING UNDERLYING DRIVERS

The BCTF Outcome Document acknowledges the necessity to address the underlying social, cultural, and economic drivers of demand within communities in source and destination countries. In addition to targeting immediate consumer behaviour, tackling root causes such as livelihood insecurity, cultural practices, and habitat degradation is critical to reducing incentives for poaching, trafficking, and consumption. When designing behaviour change initiatives, the CITES (2021) guidance for effective messaging also calls for the consideration of the benefits of and barriers to adopting a desired behaviour, requiring a deeper understanding of the underlying drivers of demand.

Source Countries

In source countries, improving local livelihoods and aligning conservation with community benefits is fundamental. This is particularly the case in areas prone to HWC. Given the growth rates in human population, agricultural activity, infrastructure projects, and risks from climate change, wildlife and human populations are more prone to overlap, increasing the likelihood of HWC (IUCN, 2022). While it must be recognised that HWC is a complex and layered issue, co-designed management strategies through participatory stakeholder processes have been found to be key in enabling human-wildlife peaceful coexistence (WWF, 2025). This principle can be observed in Nepal's aforementioned SLCAP, which integrates community livelihoods as well as socio-cultural elements, and explores strengthening faith-based foundations for positive correlation between nature and people. Positive impacts of this approach can also be observed in India, where Asiatic lion populations have seen a 32% rise since 2020 and are believed to be stable and thriving across seven districts in Gujarat (IBCA, 2024 a). Among other measures, efforts by the Indian government to address human-wildlife conflict and other concerns regarding the safety of lions and communities have resulted in coexistence, leading to better conservation (IBCA, 2025 b). For instance, the *Gir Samvad Setu programme* established in 2019 seeks to promote and sustain the involvement of local communities as stewards of this species (Ibid). These efforts are believed to have been crucial to increase in and re-integration of Asiatic lions in the region. Furthermore, high market prices for wildlife products have been documented to be important incentives to engage in the illegal trade of wildlife (Prasad *et al.* 2022). Poverty and unemployment are therefore important underlying drivers in communities in source countries. In 2020, the Covid-19 pandemic resulted in lockdowns, businesses closing, and large-scale migration of workers from urban to semi-urban areas - circumstances that reportedly led to an increase in cases of wildlife poaching and trade during this period (Badola, 2020). For instance, an increase in wildlife poaching was documented in Nepal during this period, with reports expressing concerns about the impact of the pandemic, as it may present challenges in tiger conservation (Neupane & Khadka, 2021). ABC incident data analysis finds that between 2000-2024, most incidents occurred in 2020, which accounted for

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7% of all incidents across that 25-year period *(Figure 32)*. As such, potential actions aimed at addressing underlying drivers of demand must seek to understand the impact that times of economic hardship may have on wildlife crime.

Consumer Countries

In consumer countries, persistent demand driven by traditional medicine remains a concern. The commercial availability of products claiming to contain leopard bone continues to be reported. In China, documented sales of leopard bone wine and traditional medicine products, some reportedly bearing official permits, highlight gaps in implementation and the continued role of traditional medicine as a key driver of demand (EIA, 2025 a). An assessment in 2021 found that 43% of traditional medicine practitioners in Viet Nam still prescribed tiger products (TRAFFIC, 2021) and a 2023 survey suggested a rise in self-reported use since 2017 across the Vietnamese public due to the increased availability and strong belief in the functional use of tiger bone glue (TRAFFIC, 2024). Such endorsement by governments and industries may undermine demand reduction efforts aiming to reduce this type of demand. Furthermore, luxury goods containing big cat products and derivatives have been a source of increasing concern, with this type of demand potentially surpassing the traditional medicine market (SC65 Doc. 38). Challenges in addressing luxury markets had been noted by previous reviews, particularly for the trade in wines, jewellery from teeth and claws, and skins (COP18 Doc. 71.1). In recent years, trade in parts and derivatives driven by this demand has continued to be documented (Vu *et al.* 2022), with intensified concerns due to the increase in wealth of countries where potential consumers may regard these products as a symbol of luxury and status (SC75 Doc. 13). Most recently, Thailand indicated that addressing the demand and enforcement concerning the use of and trade in tiger amulets, particularly when they are sought for spiritual purposes, presents enforcement challenges (SC77 Doc. 41.2).

Image 2: "Protect Endangered Species Special Exhibition" at the National Zoological Museum, Beijing [55]

Studies suggest that luxury products and prestigious gifts may now be one of the main sources of demand for big cat products (EIA, N.D.). In luxury markets, increased market prices resulting from bans may only increase the desirability of products, potentially driving this trade underground (Prasad *et al.* 2022). As such, demand reduction initiatives seeking to address this market must be adapted through a deep understanding of the desires and drivers of this type of consumer to develop targeted and more effective interventions.

[55] Image 2, provided by WWF

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Image 3: WWF China's Demand Reduction Campaigns on Long-Term Display at Airport Customs © WWF China [56]

4.2 CASE STUDIES ON DEMAND REDUCTION

Case Study 9: Demand reduction in main consumer countries

Targeted demand reduction initiatives aligning closely with CITES measures have been implemented in both China and Viet Nam, two of the main consumer markets for ABC products (Ngoc Vu, 2023). These examples illustrate how specialist-led approaches, partnerships with cultural and professional stakeholders, and careful use of behavioural insights can contribute to measurable reductions in demand.

In China, WWF implemented a series of initiatives between 2018 and 2024 that addressed demand drivers linked to traditional culture, medicine, and tourism. Public campaigns reached more than 10 million people and secured two million pledges from consumers to become "Tiger Protectors" and refuse tiger products. Major cultural initiatives included the Protect Endangered Species exhibition at the National Zoological Museum, which attracted over 300,000 visitors, and the Save the Roar event on Global Tiger Day 2023, which reached 1.1 million viewers through online livestreams. In 2024, a collaboration with Beijing's Guanfu Museum brought conservation messaging into a cultural heritage context, attracting more than 100,000 visitors and highlighting that cultural appreciation does not require the use of endangered wildlife.

These campaigns were reinforced through engagement with industry and enforcement actors. For example, in collaboration with Cainiao, a leading e-commerce logistics company, wildlife protection messages were distributed on courier labels across the country, while Customs adopted WWF-designed deterrence posters for display in airports. In addition, WWF employed AI-powered social marketing tools and techniques to identify and target high-risk audiences, in line with CITES calls for evidence-based and specialist-led approaches.

In Viet Nam, TRAFFIC implemented a SBC programme from 2020 to 2023, focusing on tiger bone glue, one of the most prevalent products on the domestic market. Messaging was designed to address the primary motivations for consumption, perceived to be medicinal benefits and family obligations, embedding demand reduction messages into everyday social and professional contexts. The initiative was implemented in close collaboration with the Ministry of Health, traditional medicine associations, hospitals, clinics, and

[56] Image 3, provided by WWF

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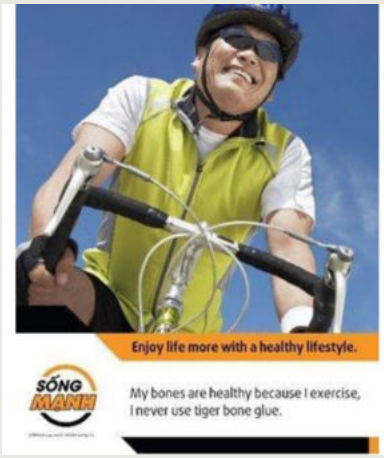

Image 4: Public Service Announcement concept emphasizing healthy lifestyles.

Image 5: Public Service Announcement concept on protecting the health of family members.

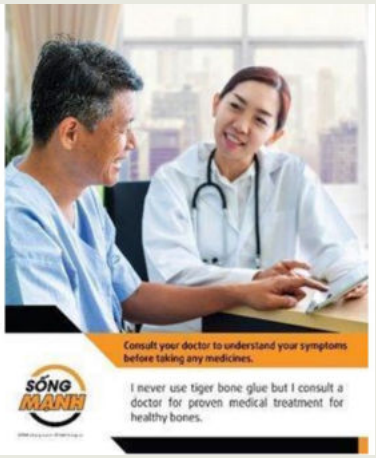

Image 6: Public Service Announcement concept to promote the avoidance of self-medication.

professional leaders, ensuring that messages were delivered by trusted voices.

Over three years, the programme reached an estimated 2.5 million people, engaging 3,000 government officials, 1,500 business people, and 30 key influencers in the traditional medicine sector. It also worked directly with more than 2,500 practitioners, lecturers, and students, while 12 major pharmaceutical companies committed to concrete actions supporting wildlife conservation. Evidence of shifting norms within the traditional medicine community was particularly notable: 100% of practitioners surveyed at project events pledged not to recommend tiger bone glue and committed to promoting sustainable alternatives. The distribution of a Handbook on Alternatives to Tiger Bone Glue further reinforced this change, with clinical testing showing that practitioners who received it were significantly less likely to advise patients to use tiger bone glue.

Taken together, these initiatives highlight how demand reduction efforts can combine broad-scale cultural and public engagement with deep, targeted work in key professional communities. Both examples align with CITES guidance by focusing on specific audiences and motivations, applying behavioural science, and building partnerships with industries and institutions that influence consumer choice. Importantly, both also reported measurable outcomes, such as pledges, audience reach, and documented behavioural change among practitioners, providing indicators of progress that can guide future initiatives.

It should be noted, however, that these initiatives have been primarily driven by NGOs rather than government agencies and are often reliant on donor funding, which can limit their long-term sustainability. While NGO support is critical in contexts with limited capacity to design and implement targeted behaviour change campaigns, stronger government leadership could enhance the reach, legitimacy, and durability of these efforts. Moving forward, Parties may wish to increase their direct involvement in, and ownership of, targeted behaviour change initiatives within their jurisdictions, ensuring that these efforts are embedded in national policy frameworks, existing government departments, and enforcement strategies.

4.3 RECOMMENDATIONS ON DEMAND REDUCTION

Measure: "where necessary and appropriate, remove references to parts and derivatives of Appendix-I Asian big cats from the official pharmacopoeia and include acceptable substitute products that do not endanger other wild species, and introduce programmes to educate the industry and user groups in order to eliminate the use of substances derived from Appendix-I Asian big cats and promote the adoption of appropriate alternatives" Resolution Conf. 12.5 (Rev. CoP19)

Good Practice: Key consumer countries and trade hotspots, such as China, Viet Nam, Thailand, Nepal, and India have advanced national programmes, in coordination with communities and key industries, to reduce the desirability and demand of ABC products while building awareness on the conservation needs of these species.

Challenge: Mixed messaging from governments and industries may undermine the effectiveness of behaviour change initiatives. Despite demand reduction efforts targeting traditional medicine throughout the years, the

[56] Image 2, provided by WWF

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consumption of these products remains in cultural and social norms. Their widespread availability and public trust in their health benefits continues to reinforce these norms. At the same time, new forms of demand, for example for luxury products, appear to be on the rise.

Opportunity: A prohibition and rejection of ABC parts and products by governments and industries would provide a stronger message against their use. In doing so, the potential impact of increased prices and rarity in the desirability of luxury products must be considered. As such, these prohibitions need to be complemented by strong, consistent, and harmonised messaging that seeks to address social norms and values and that is supported through effective law enforcement.
The role of government and industry in shaping norms is critical. The increased engagement of government and industry representatives on demand reduction campaigns can help reach wider audiences and send more impactful messages. Future efforts could therefore focus on expanding the reach of tested approaches through stronger engagement with the government and industry leaders, sustaining efforts over time, and pairing behavioural interventions with strengthened and consistent enforcement. This combined approach would increase the likelihood of lasting changes in attitudes and consumer practices.

Measure: "contribute financial and technical assistance to enable range States to comply with the implementation of this Resolution and enhance capacity building, improvement of conservation measures and sustainable livelihoods, so as to contribute towards the conservation of Asian big cats" Resolution Conf. 12.5 (Rev. CoP19)
Good practice: The positive impacts of sustainable livelihoods programmes and community engagement in source countries can be observed through the restoration of the Asiatic lion populations in India. Mass awareness campaigns and efforts to reduce HWC by the Indian government have resulted in a peaceful coexistence between the Maldharis and lions in the Gir Forest. This community's stewardship has reportedly been fundamental to the success of this conservation initiative.

Challenge: Demand reduction strategies must consider the broader socioeconomic context in which demand and poaching persist. Communities living near wildlife habitats often face poverty and limited livelihood opportunities. During periods of economic hardship, such as the COVID-19 pandemic, reports highlighted increased poaching activity, as some individuals turned to wildlife as a source of income. However, no initiatives seeking to address the underlying drivers in communities in source ABC countries have been reported to CITES in recent years.

Opportunity: While guidance on the BCTF Outcome Document is not mandatory, it provides a foundation for the long-term success of demand reduction initiatives. In its demand reduction recommendations, it invites Parties to consider addressing the underlying drivers of demand within communities in source countries, e.g., by investing in livelihood approaches. Promoting sustainable livelihood alternatives, enhancing economic resilience, and strengthening community engagement in conservation can increase incentives to co-exist with, and potentially become stewards of wildlife. As such, Parties should seek to support and secure investment for initiatives working to educate and increase awareness on the ecological and anthropogenic significance of big cats, their threats (and how these also impact communities and humanity), and conservation needs.

This approach provides a more holistic response, ensuring that both consumer behaviour and pressures in communities in source countries are addressed simultaneously.

Measure: "work with relevant specialists such as consumer behaviour change to end demand for big cat parts and derivatives, social marketing and communication experts, to undertake evidence based targeted behaviour change initiatives, including establishing baselines and strong monitoring and evaluation mechanisms to assess its efficacy" Resolution Conf. 12.5 (Rev. CoP19)

Good practice: At SC77 and SC78, Parties such as China, Thailand, and the United States have reported on conducting thorough SBC campaigns targeting potential national and international ABC consumer markets.

Challenge: Despite notable actions in recent years, significant levels of demand continue to be documented. These findings underscore that, while methodologies such as SBC approaches have proven effective, their application has not yet reached its full potential.

Achieving it would require an enhanced understanding of consumer markets and their needs, drivers, and desires. However, reporting on these areas remains limited and inconsistent, with no mention of the incorporation of expert and specialist insights. As such, more robust data collection and analysis may be needed to identify and understand the most influential drivers of trade and develop improved and targeted interventions.

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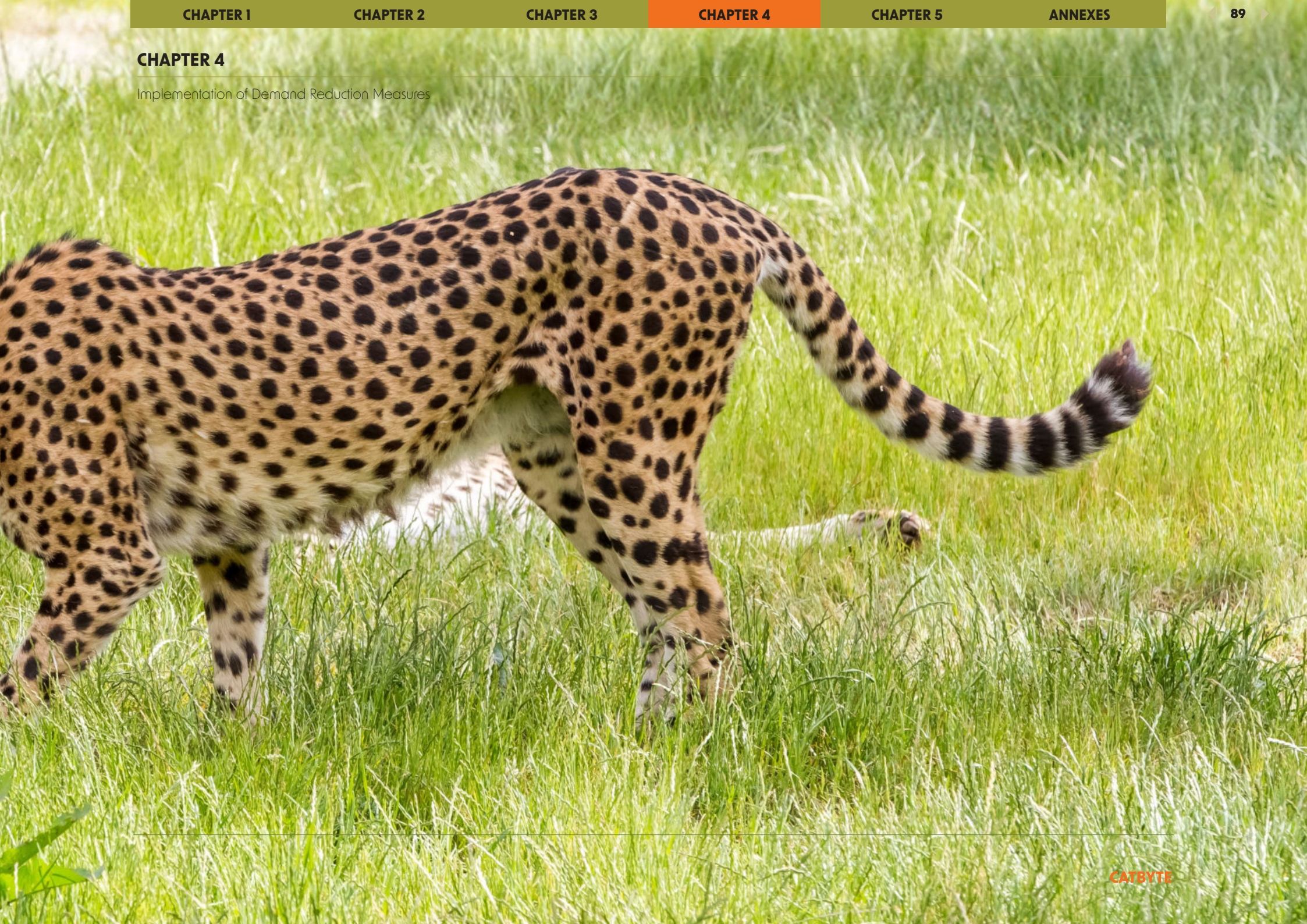
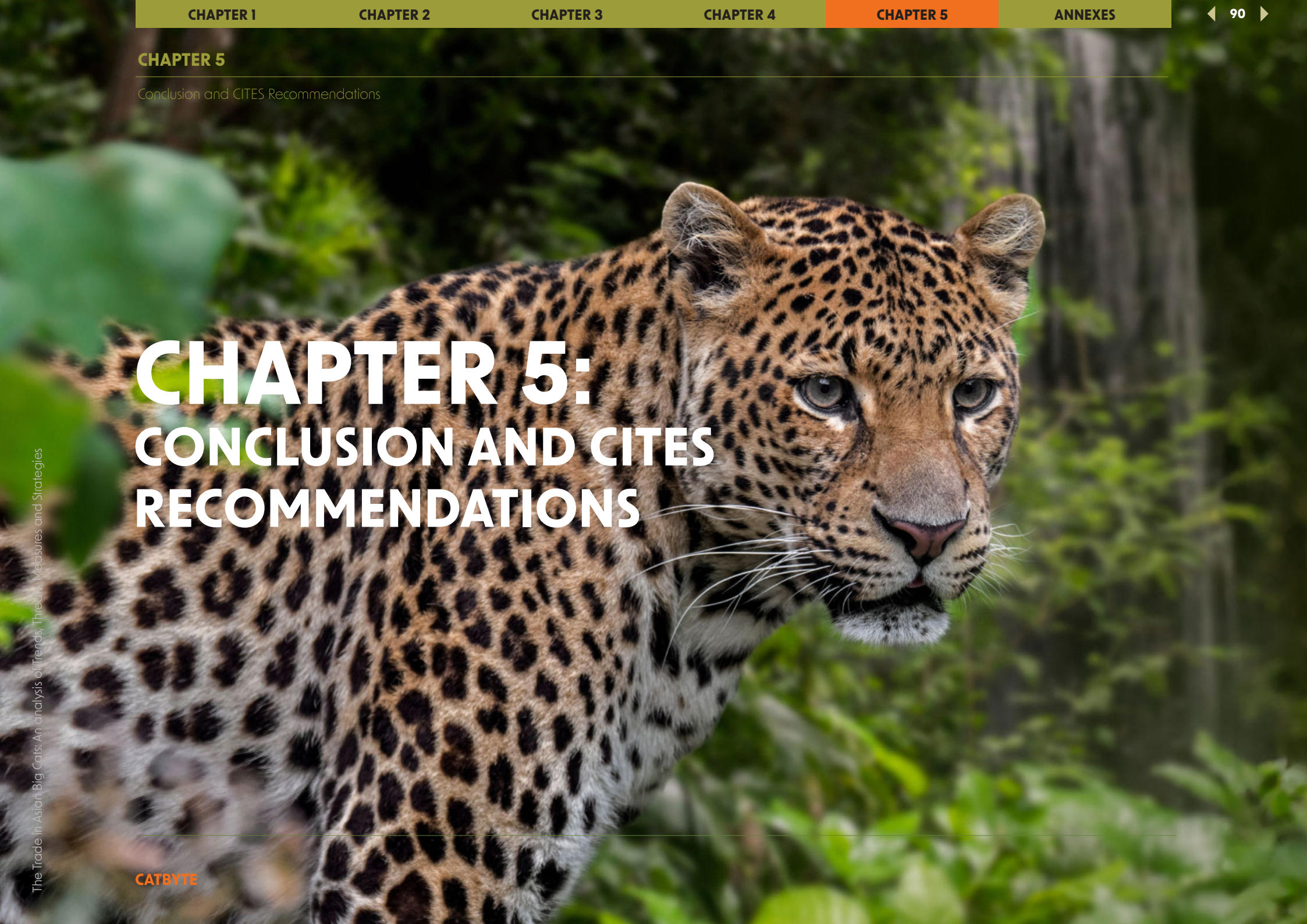
Opportunity: Building on positive results, future reporting on behaviour change initiatives can provide a greater emphasis on monitoring and evaluation (M&E) mechanisms. Comprehensive M&E reporting would allow for interested parties to assess real-world impact of these campaigns and potentially promote their adoption or recommend areas of improvement.

Incorporating these insights, as well as contributions from experts and specialists, in the design and implementation of behaviour change initiatives would open opportunities to ensure these remain targeted and impactful.

CHAPTER 4

Implementation of Demand Reduction Measures





CHAPTER 5: CONCLUSION AND CITES RECOMMENDATIONS

CHAPTER 5

Conclusion and CITES Recommendations

This report provides a nuanced understanding of the trade dynamics of ABCs while highlighting opportunities to address persistent challenges that continue to undermine the implementation of relevant CITES measures on ABCs. In doing so, it also draws attention to the abundance of information available on this trade and the importance of using such information to build evidence-based strategies and guide actions moving forward.

Greater resilience in tackling ABC trafficking can be achieved through international, regional, and inter-agency approaches that strengthen enforcement and intelligence frameworks. These frameworks should explicitly recognise the interconnected nature of trade across multiple big cat species particularly tigers and leopards, enabling more coordinated and adaptive responses.

Reporting mechanisms by CITES Parties contribute significantly to this body of knowledge, offering valuable insights into national-level developments, enforcement actions, and emerging challenges. These reports remain an essential foundation for understanding trade patterns and responses. At the same time, Parties and observer NGOs have repeatedly noted that such reporting can be inconsistent, fragmented, or limited in scope. Therefore, to maximise the value of Party reporting, it should be complemented by independent analysis of all available data sources, including those generated by civil society, academia, intergovernmental organisations, and open-source research. We suggest that consideration be given to the establishment of an independent reporting mechanism to support the Convention's decision-making on the trade in ABCs. Such a mechanism could draw from multiple verified data sources and apply robust methodologies that triangulate information to ensure reliability and accuracy, as exemplified in the type of analysis presented in this report. This would not only provide Parties and CITES bodies with a more informed picture of trade dynamics but also help identify gaps, trends, and priority areas for action in a systematic and transparent way.

By complementing existing Party reports with independent, evidence-based analysis, the Convention could strengthen its ability to respond proactively to the evolving dynamics of the illegal trade in Asian big cats. Additionally, the Conference of the Parties may wish to consider the following:

ON RESOLUTION CONF. 12.5 (REV COP19)

While comprehensive, the Resolution could be strengthened by clarifying the meaning of "deterrent penalties", particularly when investigating and sentencing high-level offenders, considering current debates on deterrence and penalties that are proportional to the offence.

In reviewing the implementation Res Conf 12.5, Parties can be further invited to implement the recommendations regarding wildlife crime linked to the internet (CoP20 Doc. 38).

It may also be valuable to provide separate provisions giving greater emphasis to anti-money laundering approaches, forensic analytical techniques, intelligence-led enforcement, and collaboration with internet and transportation companies. These approaches serve distinct purposes and could be more effectively prescribed if addressed individually.

ON RESOLUTION CONF. 11.3 (REV COP19)

Given the persistence and evolution of online trade in the period under review (2000–2024), current provisions on this issue may no longer be sufficient. While Res Conf 11.3 (Rev CoP19) addresses important aspects of enforcement and compliance, the scale and complexity of online trade suggest that a dedicated resolution may now be warranted.

ON RESOLUTION CONF. 9.6 (REV COP19)

Encourage all Parties, particularly range States, consumer countries, and identified trade hotspots for ABCs, to ensure consistent interpretation of "readily recognisable parts or derivatives," as defined by the Resolution.

REFER

ENCES

REFERENCES

Abedin, I.; Singha, H.; Kang, H.-E.; Kim, H.-W.; Kundu, S. Forecasting Suitable Habitats of the Clouded Leopard (Neofelis nebulosa) in Asia: Insights into the Present and Future Climate Projections Within and Beyond Extant Boundaries. Biology 2024, 13, 902. https://doi.org/10.3390/biology13110902

Aljazeera (2014, December 30). Chinese businessman jailed over tiger feast. https://www.aljazeera.com/economy/2014/12/30/chinese-businessman-jailed-over-tiger-feast

Amur Tiger Center (2023). The Amur Tiger Center Performance Report 2013-2023. https://amur-tiger.ru/uploads/files/at200-270eng2211_0717131001701079291.pdf

Anagnostou, M. (2021). Synthesizing knowledge on crime convergence and the illegal wildlife trade. Environmental Challenges 5. https://doi.org/10.1016/j.envc.2021.100222

Asia Pacific Group (APG) of the Financial Action Task Force (2023). Anti-money laundering and counter-terrorist financial measures Lao PDR: Mutual evaluation report. https://apgml.org/members-and-observers/members/member-documents.aspx?m=a6c4a803-0e15-4a43-b03a-700b2a211d2e

AZA, EAZA, EIA, Four Paws, Freeland, Panthera, WCS, WCA, WJC, WFF, WAP, WWF, & ZSL (2023). Roadmap to Closing Captive Tiger Facilities of Concern. https://wwfeu.awsassets.panda.org/downloads/roadmap-jul-24.pdf?12131966/roadmap-to-closing-captive-tiger-facilities-of-concern

Badola, S. (2020). Indian wildlife amidst the COVID-19 crisis: An analysis of status of poaching and illegal wildlife trade. TRAFFIC, India office. https://wwfin.awsassets.panda.org/downloads/indian_wildlife_amidst_the_covid_19_crisis.pdf

Banks, D. (2022, February 1). It's a new Year of the Tiger and China needs to get serious about protecting this iconic species. https://eia-international.org/blog/its-a-new-year-of-the-tiger-and-china-needs-to-get-serious-about-protecting-this-iconic-species/

Basel Institute on Governance (BIG) (2021). Wildlife crime – understanding risks, avenues for action: Part 1 Illegal wildlife trade and financial crime. https://baselgovernance.org/sites/default/files/2021-04/Part%201%20Wildlife%20crime.pdf

Block, K. & Amundson, S. (2023, June 12). Good news: Big Cat Public Safety Act rules are now reality. Humane World Blog. https://www.humaneworld.org/en/blog/good-news-big-cat-public-safety-act-rules-are-now-reality

Born Free (2024). Clawing at the Cages: Big Cats in Zoos. Born Free USA. https://www.bornfreeusa.org/campaigns/animals-in-captivity/clawingatthecages/

Boston Consulting Group (BCG) (2025). Perspectives: Changes to Development Financing Landscape and Levers to Adapt. https://media-publications.bcg.com/pdf/Changes_to_Development_Finance_Landscape-Perspectives-May_2025.pdf

Breitenmoser, U., Mallon, D.P., Ahmad Khan, J. & Driscoll, C (2008). Panthera leo ssp. persica. The IUCN Red List of Threatened Species 2008: e.T15952A5327221. http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T15952A5327221.en

Coals, P., Dickman, A., Hunt, J., Grau, A., Mandisodza-Chikerema, R., Ikanda, D., Macdonald, D.W., Loveridge, A. (2020). Commercially-driven lion part removal: What is the evidence from mortality records? Global Ecology and Conservation 24. https://doi.org/10.1016/j.gecco.2020.e01327

Coals, P. Moorhouse, T.P., D'Cruze, N.C. ,Macdonald, D., & Loveridge, A.J. (2020). Preferences for lion and tiger bone wines amongst the urban public in China and Vietnam. Nature Conservation 57. DOI:10.1016/j.jnc.2020.125874

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (2021). Guidance for CITES Parties to Develop and Implement Demand Reduction Strategies to Combat Illegal Trade in CITES listed Species. https://cites.org/sites/default/files/common/prog/demand_reduction/CITES%20Guidance%20on%20Demand%20Reduction_English.pdf

Cruise, A. (2025, April 22). SA government continues to defend odious trade in tigers, perpetuating their suffering in captivity. Daily Maverick. https://www.dailymaverick.co.za/article/2025-04-22-sa-government-continues-to-defend-odious-trade-in-tigers/

Davis, E.O., Willemsen, M., Dang, V., Connor, D.O., & Glikman, J.A. (2020). An updated analysis of the consumption of tiger products in urban Vietnam. Global Ecology and Conservation 22. https://doi.org/10.1016/j.gecco.2020.e00960

D'Cruze, N. & Macdonald, D.W. (2025). Clouded in mystery: the global trade in clouded j3.

Biodiversity and Conservation 24, 3505-3526. https://doi.org/10.1007/s10531-015-1010-9

Din J.U., Bari, F., Ali, H., Rehman, E., Adli. D.S.H., Abdullah, N.A., Norma-Rashid, Y., Kabir, M., Hameed, S., Nawaz, D.A., Nawaz, M.A. (2022) Drivers of snow leopard poaching and trade in Pakistan and implications for management. Nature Conservation 46, 49-62. https://doi.org/10.3897/natureconservation.46.76036

REFERENCES

Department of Forestry (DOF) (Lao PDR government) (2025, September 11) Standard Operating Procedure (SOP) Technical Standards for the Management of Captive Tiger (Panthera tigris) Breeding Facilities in Lao PDR. https://drive.google.com/file/d/1HVswQQoXcw44Z2IbKOn6Ka6la98gJtnc/view

Department of Interior (United States government) (2025). U.S. Fish and Wildlife Service 2026 Budget. https://www.doi.gov/sites/default/files/documents/2025-06/fy26bibfws508.pdf

Department of Justice (DOJ) (United States government) (2018, August 1). New York man sentenced to prison for trafficking endangered lion and tiger parts. https://www.justice.gov/archives/opa/pr/new-york-man-sentenced-prison-trafficking-endangered-lion-and-tiger-parts

Department of Justice (DOJ) (United States government) (2023, September 27). Undercover jaguar cub deal results in Big Cat Act charges. https://www.justice.gov/usao-sdtx/pr/undercover-jaguar-cub-deal-results-big-cat-act-charges?ftag=MSF0951a18

Department of National Parks (DNP) (Thailand government) (2024). https://catalog.dnp.go.th/dataset/68_dnp09_13_01/resource/16672aa3-8db4-4b6f-9609-d64dfae8c72c

Department of Treasury (United States government) (2018, January 30). Treasure Sanctions the Zhao Wei Transnational Criminal Organization. https://home.treasury.gov/news/press-releases/sm0272

DoFPS 2023. Status of Tigers in Bhutan: The National Tiger Survey Report 2021–2022. Bhutan Tiger Center, Department of Forests and Park Services, Ministry of Energy and Natural Resources, Royal Government of Bhutan, Thimphu, Bhutan.

Dorji, P. & Powrel, R.B (2022). A patterns of livestock depredation by snow leopard to the yak herding pastoralist in western Bhutan. Pastoralism 12 (33) https://doi.org/10.1186/s13570-022-00247-3

Duangchantrasiri, S., Umponjan, M., Simcharoen, S., & Pattanavibool, A. (2016). Dynamics of a low-density tiger population in Southeast Asia in the context of improved law enforcement. Conservation Biology 30(3), 639-648. DOI: 10.1111/cobi.12655

Durant, S.M., Groom, R., Ipavec, A., Mitchell, N. & Khalatbari, L (2024). Acinonyx jubatus (amended version of 2023 assessment). The IUCN Red List of Threatened Species 2024: e.T219A259025524. https://dx.doi.org/10.2305/IUCN.UK.20241.RLTS.T219A259025524.en

Education for Nature Viet Nam (ENV) (2021) A major breakthrough in combatting illegal tiger trafficking in Nghe An. https://env4wildlife.org/2021/08/17/a-major-breakthrough-in-combatting-illegal-tiger-trafficking-in-nghe-an/

Education for Nature Viet Nam (ENV) (2025, May 15). Hanoi: 7 years for the "kingpin" of a transnational wildlife trafficking network from Nghe An province. https://env4wildlife.org/2025/05/16/hanoi-7-years-for-the-kingpin-of-a-transnational-wildlife-trafficking-network-from-nghe-an-province/

Egmont Centre of FIU Excellence and Leadership (ECOFEL) (2021). Financial Investigations Into Wildlfie Crime. https://egmontgroup.org/wp-content/uploads/2021/09/2021_ECOFEL_-_Financial_Investigations_into_Wildlife_Crime.pdf

Elves-Powell, J., Lee, H., Axmacher, J.C., Durant, S.M. (2024). Turning the tide on big cat trade: Expert opinion on trends and conservation lessons from the Republic of Korea. PLOS ONE 19(5): e0299783. https://doi.org/10.1371/journal.pone.0299783

Elwin, A., Asfaw, E., & D'Cruze, N. (2024). Under the lion's paw: lion farming in South Africa and the illegal international bone trade. Nature Conservation 56, 1-17. https://doi.org/10.3897/natureconservation.56.124555

EMS Foundation (N.D.). A looming crisis – the captive big cat industry, Covid_19 and government culpability. https://emsfoundation.org.za/a-looming-crisis-the-captive-big-cat-industry-covid_19-and-government-culpability/

Environmental Agriculture (2023, December 2022). https://nongnghiepmoitruong.vn/viet-nam--lao-tang-cuong-phoi-hop-trong-linh-vuc-lam-nghiep-d372472.html

Environmental Investigation Agency (EIA) (N.D.). Eradicating the market for big cats. https://eia-international.org/wp-content/uploads/EIA-report-Eradicating-the-market-for-big-cats-spreads.pdf

Environmental Investigation Agency (EIA) (2017). Cultivating Demand: The growing threat of tiger farms. https://eia-international.org/wp-content/uploads/Cultivating-Demand-The-Growing-Threat-of-Tiger-Farms.pdf

Environmental Investigation Agency (EIA) (2018, April 19). Court issues a five-year jail term for selling tiger bone wine. https://eia-international.org/news/chinese-court-issues-five-year-jail-term-selling-tiger-bone-wine/

Environmental Investigation Agency (EIA) (2020 a). A Bitter Pill to Swallow: China's flagrant trade in leopard bone products. https://eia-international.org/wp-content/uploads/EIA-report-Bitter-Pill-to-Swallow-spreads.pdf

REFERENCES

Environmental Investigation Agency (EIA) (2020 b). On the Butcher's Block: The Mekong Tiger Trade Trail. https://eia-international.org/wp-content/uploads/On-the-Butchers-Block-Tigers-Mekong-Report-2020-SCREEN-SINGLE-PAGES.pdf

Environmental Investigation Agency (EIA) (2022, March 8). Footage reveals criminal-run tiger 'farms' in Laos have actually been expanded, not shut down. https://eia-international.org/news/footage-reveals-criminal-run-tiger-farms-in-laos-have-actually-been-expanded-not-shut-down/

Environmental Investigation Agency (EIA) (2023 a). Investing in extinction: How the global financial sector profits from traditional medicine firms using threatened species. https://eia-international.org/wp-content/uploads/2023-EIA-UK-Investing-in-Extinction_SINGLE-PAGES.pdf

Environmental Investigation Agency (EIA) (2023 b). CITES SC77 EIA Briefing on Documents relating to Asian Big Cats. https://eia-international.org/wp-content/uploads/SC77-EIA-ABC-Briefing.pdf

Environmental Investigation Agency (EIA) (2025 a). Gaps in China's Implementation of CITES Asian Big Cat Recommendations. https://eia-international.org/wp-content/uploads/2025-SC78-CITES-BIG-CATS-briefing.pdf

Environmental Investigation Agency (EIA) (2025 b). EIA Recommendations for the 78th meeting of the CITES Standing Committee. https://eia-international.org/wp-content/uploads/EIA-UK-Recommendations-for-the-78th-Meeting-of-the-CITES-Standing-Committee.pdf

Eurogroup for Animals (2024, March 28). EU adopts revised Environmental Crime Directive: what are the advances for animals?. https://www.eurogroupforanimals.org/news/eu-adopts-revised-environmental-crime-directive-what-are-advances-animals

Eurolex (2024). Directive (EU) 2024/1203 of the European Parliament and of the Council. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401203

European Union (EU) (2023). EU Guidance Document on the export, re-export and intra-EU trade of captive-born and bred live tigers and their parts and derivatives (2023/C 135/01). https://tinyurl.com/v9f8mrxb

Everatt, K.T., Moore, J.F., & Kerley, G.I.H (2019) Africa's apex predator, the lion, is limited by interference and exploitative competition with humans. Global Ecology and Conservation 20. https://doi.org/10.1016/j.gecco.2019.e00758.

Ewart, K.M., Sitam, F.T., Ali, N.A.N.B.G., Ogden, R., Morgan, K.I., Tran, H.M., Bui, T.P.T., Troung, Q.N., Nguyen, S.G., Rosli, N., Penchart, K., Ouitavon, K., & McEwing, R. (2025). TigerBase: A DNA registration system to enhance enforcement and compliance testing of captive tiger facilities. Forensic Science International: Genetics 74. https://doi.org/10.1016/j.fsigen.2024.103149

Faolex Database (N.D.). Wild Animal Conservation and Protection Act, B.E. 2562 (2019). https://faolex.fao.org/docs/pdf/tha201932.pdf

Financial Action Task Force (FATF) (2020). Money Laundering and the Illegal Wildlife Trade. FATF Paris, France. https://www.fatf-gafi.org/content/dam/fatf-gafi/reports/Money-laundering-and-illegal-wildlife-trade.pdf.coredownload.pdf

Financial Action Task Force (FATF) (2025, February 21). Jurisdictions under increased monitoring – 21 February 2025. https://www.fatf-gafi.org/en/publications/High-risk-and-other-monitored-jurisdictions/increased-monitoring-february-2025.html

Fish and Wildlife Service (FWS) (2023). What You Need to Know About the Big Cat Public Safety Act. *https://www.fws.gov/what-you-need-know-about-big-cat-public-safety-act*

Foreign Interference Commission (2023). Declaration of Zhao Wei as PNG. https://commissioningerenceetrangere.ca/fileadmin/commission_ingerence_etrangere/Documents/Preuves_et_Presentations/Preuves/CAN.SUM.000016.pdf

Fourage, A., Taylor, T., Wiek, E., & Nijman, V. (2025). Increase in the number of captive lions in Thailand suggests ineffective legislation. Discover Conservation 2 (19). https://doi.org/10.1007/s44353-025-00040-4

Ghimire S.K., Bista G., Lama N.S., Craig S.R., Lama W., Gurung T.N., Bista T., Gurung N., Gurung T.D., Zangpo T. and Lama T.C. (2021). Without the Plants, We Have No Medicine: Sowa Rigpa, Ethnobotany, and Conservation of Threatened Species in Nepal. WWF Nepal and Himalayan Amchi Association, Kathmandu, Nepal. https://www.researchgate.net/publication/357714922_Without_the_Plants_We_Have_No_Medicine_Sowa_Rigpa_Ethnobotany_and_Conservation_of_Threatened_Species_in_Nepal

Global Conservation (N.D.). Clouded leopard. https://globalconservation.org/endangered-species/clouded-leopard

Global Initiative against Transnational Organized Crime (GITOC) (2021). The Chaimat Case: Illegal logging, organized crime and money laundering in Thailand. https://globalinitiative.net/wp-content/uploads/2021/05/The-Chaimat-case-Illegal-logging-organized-crime-and-money-laundering-in-Thailand-1.pdf

REFERENCES

Global Initiative against Transnational Organized Crime (GITOC) (2025). Railroad to extinction: How a rail link with China supercharged an illegal wildlife tourism industry in Laos. https://globalinitiative.net/wp-content/uploads/2025/07/Railroad-to-extinction-How-a-rail-link-with-China-supercharged-an-illegal-wildlife-tourism-industry-in-Laos-GI-TOC-July-2025.pdf

Gomez, L. & Shepher, C.R. (2021). The illegal exploitation of the Javan Leopard (Panthera pardus melas) and Sunda Clouded Leopard (Neofelis diardi) in Indonesia. Nature Conservation 3, 25-39. https://doi.org/10.3897/natureconservation.43.59399

Goodrich, J., Wibisono, H., Miquelle, D., Lynam, A.J., Sanderson, E., Chapman, S., Gray, T.N.E., Chanchani, P. & Harihar, A. (2022). Panthera tigris. The IUCN Red List of Threatened Species 2022: e.T15955A214862019. https://dx.doi.org/10.2305/IUCN.UK.2022- 1.RLTS.T15955A214862019.en

Gomez L, Shepherd CR (2021). The illegal exploitation of the Javan Leopard (Panthera pardus melas) and Sunda Clouded Leopard (Neofelis diardi) in Indonesia. Nature Conservation 43, 25-39. https://doi.org/10.3897/natureconservation.43.59399

Gray, T., Borah, J., Coudrat, C.N.Z., Ghimirey, Y., Giordano, A., Greenspan, E., Petersen, W., Rostro-García, S., Shariff, M., & Wai-Ming, W. (2021). Neofelis nebulosa. The IUCN Red List of Threatened Species 2021: e.T14519A198843258. https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T14519A198843258.en

Green, J, Jakins, C, de Waal, L and D'Cruze, N. (2021). Ending commercial lion farming in South Africa: A gap analysis approach. Animals 11 (1717). https://doi.org/10.3390/ani11061717

Hanafiah, J. (2025, September 12). Lima Tahun Penjara untuk Penjual Kambuhan Kulit Harimau Sumatera. Mongabay. https://mongabay.co.id/2025/09/12/lima-tahun-penjara-untuk-penjual-kambuhan-kulit-harimau-sumatera/

International Big Cat Alliance (IBCA) (2024 October 14). Big Cats: A magazine by IBCA on wildlife conservation 1 (1). https://ibca.world/img/ Big-C**ats-Magazine-September-October-2024.pdf**

International Big Cat Alliance (IBCA) (2025 a, August 11). India now has 891 Asiatic Lions in the wild [infographic]. LinkedIn. https://tinyurl.com/3hah4fzv

International Big Cat Alliance (IBCA) (2025 b). Big Cats: A a magazine by IBCA on wildlife conservation 2(1). https://ibca.world/img/magazine/Big%20Cat%20Magazine%20Jan-Feb2025.pdf

International Criminal Police Organization (Interpol) (2025, February 4). Nearly 20,00 live animals seized, 365 suspects arrested in largest-ever wildlife forestry operation. https://www.interpol.int/en/News-and-Events/News/2025/Nearly-20-000-live-animals-seized-365-suspects-arrested-in-largest-ever-wildlife-and-forestry-operation

International Fund for Animal Welfare (IFAW) (2023, January 3). China passes revised Wildlife Protection Law. https://www.ifaw.org/international/press-releases/china-revised-law-strengthen-wildlife-protection

International Union for Conservation of Nature (IUCN) (2021). Impact results from projects implemented between 2015 and 2021: Integrated tiger habitat conservation programme. https://iucnsos.org/wp-content/uploads/2021/09/ITHCP-Phase-I-Impact-Report-updated-09.2021.pdf

International Union for Conservation of Nature (IUCN) (2022). Human-wildlife conflict. https://iucn.org/resources/issues-brief/human-wildlife-conflict

International Union for Conservation of Nature (IUCN) (2023, June 21). Protecting the Asiatic cheetah in Iran: meet Morteza Pourmirzai. https://www.iucn.nl/en/story/protecting-the-asiatic-cheetah-in-iran-meet-morteza-pourmirzai/

International Union for Conservation of Nature (IUCN) Cat Specialist Group (N.D.). Tiger Panther tigris. https://www.catsg.org/living-species-tiger

Jackson, R.M., Mishra, C., McCarthy, T.M., & Ale, S.B. (2010). Snow leopards: conflict and conservation. Biology and Conservation of Wild Felids 2, 417-430.

Joshi, A. R. (2024, October 8). Nepal's snow leopard conservation shifts focus from research to conflict mitigation. Mongabay. https://news.mongabay.com/2024/10/nepals-snow-leopard-conservation-shifts-focus-from-research-to-conflict-mitigation/

Jowkar, H., Hunter, L., Ziaie, H., Marker, L., Breitenmoser-Wursten, C. & Durant, S. (2008). Acinonyx jubatus ssp. venaticus. The IUCN Red List of Threatened Species 2008: e.T220A13035342. http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T220A13035342.en

Kaszta, Z., Cushman, S.A., Hearn, A., Sloan, S., Laurance, W.F., Haidir, I.A., & Macdonald, D.W. (2024). Projected development in Borneo and Sumatra will greatly reduce connectivity for an apex carnivore. Science of the Total Environment 918 (25). https://doi.org/10.1016/j.scitotenv.2024.170256

Kitchener A. C., Breitenmoser-Würsten Ch., Eizirik E., Gentry A., Werdelin L., Wilting A., Yamaguchi N., Abramov A. V., Christiansen P., Driscoll, C., Duckworth J. W., Johnson W., Luo S.-J., Meijaard E., O'Donoghue P., Sanderson J., Seymour K., Bruford M., Groves C., Hoffmann M., Nowell K., Timmons Z. & Tobe S. 2017. A revised taxonomy of the Felidae. The final report of the Cat Classification Task Force of the IUCN/SSC Cat Specialist Group. Cat News Special Issue 11, 80 pp.

REFERENCES

Krishnasamy, K. (2025, April 11). Securing Malaysian Skies – Combatting wildlife trafficking via air. https://www.traffic.org/views/securing-malaysian-skies-combatting-wildlife-trafficking-via-air/

Lam Anh and Hoang Chien (2020). 'Xâm nh□p đ□□ng dây buôn bán h□ xuyên qu□c gia: Chúa s□n lâm t□ Lào "ch□y" v□ Vi□t Nam (Kỳ 3)', 7 November. https://danviet.vn/xam-nhap-duong-daybuon-ban-ho-xuyen-quoc-gia-chua-son-lam-tu-lao-chay-ve-viet-nam-ky-32020071016591l722.htm.

Mallon, D.P., & Jackson, R. (2017). A downlist is not a demotion: Red List status and reality. Oryx 51(4), 1-5. DOI:10.1017/S0030605317000606

McCarty, T., & Chapron, G. (2003). Snow Leopard Survival Strategy. https://bigcatswildcats.com/download/snow_leopard_research/2003%20Snow%20Leopard%20Survival%20Strategy.pdf/

McCarthy, T., Mallon, D., Jackson, R., Zahler, P. & McCarthy, K. (2017). Panthera uncia. The IUCN Red List of Threatened Species 2017: e.T22732A50664030. http://dx.doi.org/10.2305/IUCN.UK.2017-2.RLTS.T22732A50664030.en

McEvoy, J.F., Connette, G.M., Huang, Q., Soe, P., Pyone, K.H.H., Htun, Y.L., Lin, A.N., Thant, A.L., Htun, W.Y., Paing, K.H., Swe, K.K., Aung, M., Songer, M., & Leimgruber, P. (2022). Joining the dots in an era of uncertainty – Reviewing Myanmar's illegal wildlife trade and looking to the future. Global Ecology and Conservation 37. https://doi.org/10.1016/j.gecco.2022.e02179

Mehmood, A. (2024, August 30). Lahore authorities recover snow leopard skin in crackdown against illegal wildlife trade. Tribune. https://tribune.com.pk/story/2492178/lahore-authorities-recover-snow-leopard-skin-in-crackdown-against-illegal-wildlife-trade

Mehmood, A. (2024, December 27). Breeding of big cats continues in urban settlements. Tribune. https://tribune.com.pk/story/2518571/breeding-of-big-cats-continues-in-urban-settlements

Mole, K. & Newton, D. TRAFFIC (2020). An assessment of trade, mortalities and anthropogenic threats facing lions in Tanzania and Mozambique. https://www.traffic.org/site/assets/files/14555/african_lion_trade_-_an_assessment_of_trade_mortalities_and_anthropogenic_threats_facing_lions_in_tz_mz-1.pdf

Mukpo, A. (2025, February 14). Across the world, conservation projects reel after abrupt US funding cuts. https://news.mongabay.com/2025/02/across-the-world-conservation-projects-reel-after-abrupt-us-funding-cuts/

Musing, L. (2020). Falling through the system: The role of the European Union captive tiger population in the trade in tigers. A TRAFFIC and WWF report. Cambridge, UK. https://www.traffic.org/site/assets/files/13230/falling-through-the-system.pdf

Nagri, J. (2024, September 23). Poachers sell snow leopard cub In Yasen Valley of Gilget-Baltistan. Dawn. https://www.dawn.com/news/1860467

Naqvi, S.K. (2023, August 19). Furs of snow leopards recovered, 4 held. The News International. https://www.thenews.com.pk/print/1101655-furs-of-snow-leopards-recovered-4-held

Nepal Buddhist Federation (NBF) (2024). Faith Plan for Environment 2024-2034. https://wwfasia.awsassets.panda.org/downloads/faith-plan-for-environment_2024-2034.pdf

Neupane, T. & Khadka, B. (2021, April 1). How COVID-19 became a poaching epidemic for Nepal's endagered wildlife. https://www.nimjn.org/38/wildlife-crime

Nicholson, S., Bauer, H., Strampelli, P., Sogbohossou, E., Ikanda, D., Tumenta, P.F., Venktraman, M., Chapron, G. & Loveridge, A. (2023). Panthera leo. The IUCN Red List of Threatened Species 2023: e.T15951A231696234. https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T15951A231696234.en

Not for sale (2025, July 28). Laos' GTSEZ becomes a global hub for cybercrime and human trafficking. https://wearenotforsale.org/blog/laos-cybercrime-human-trafficking/

Nowell, K., Li, J., Paltsyn, M., & Sharma, R.K. (2016) An Ounce of Prevention: Snow Leopard Crime Revisited. TRAFFIC, Cambridge, UK. **h**ttps://www.traffic.org/site/assets/files/2358/ounce-of-prevention.pdf

Ockerman, S.L.A., Cheng, S.H., Bicknell, J.E., & Robinson, J.E. (2023). The effectiveness of interventions to manage international wildlife trade. Conservation Science and Practice 6 (10). DOI: 10.1111/csp2.13205

Office of Financial Sanctions Implementation HM Treasury (UK government) Financial Sanctions Notice. https://assets.publishing.service.gov.uk/media/6572d548049516000d49be78/Notice_Global_Human_Rights_081223.pdf

Panthera (N.D.). Furs for Life. https://panthera.org/furs-for-life

Pickles, R.S.A., Anh, L.T.P, Enoch, S., & Clements, G.R. (2025). Webs of exploitation and opportunism: Tiger trafficking and crime convergence between Malaysia and Vietnam. Tends in Organized Crime. https://doi.org/10.1007/s12117-024-09549-x

Prasada, R., Rausser, G., & Zilberman, D. (2022). The Economics of Wildlife Trade and Consumption. Annual Review of Resource Economics 14, 355-377. https://doi.org/10.1146/annurev-resource-111920-010503

REFERENCES

Press Information Bureau (PIB) (2023, August 1). An illegal tiger trade dyndicate busted, the former field officer of WPSI arrested: WCCB. https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1944775

Raman, S. (2025). Both legal and illegal wildlife trade 'need better monitoring': Interview with Alice Hughes. Mongabay. https://news.mongabay.com/2025/03/both-legal-and-illegal-wildlife-trade-need-better-monitoring-interview-with-alice-hughes/

Rasphone, A., Bousa, A, Vongkhamheng, C., Kamler, J.R., Johnson, A., & Macdonald, D.W. (2022). Diet and prey selection of clouded leopards and tigers in Laos. Ecology and Evolution 12(7). https://doi.org/10.1002/ece3.9067

Reuters (2022, July 18). Malaysia seizes six tonnes of illegally trafficked animals parts. https://www.reuters.com/business/environment/malaysia-seizes-six-tonnes-illegally-trafficked-animal-parts-2022-07-18/

Shahid, A. (2023). Building ecological and sustainable transport / linear infrastructure for snow leopards in the Hindu Kush Karakoram Himalaya landscape in Pakistan. https://wwfasia.awsassets.panda.org/downloads/beast-report-2023_1.pdf

Shivakumar, S., Khettry, A., Surve, N., Rahman, H., Ghimirey, Y., Tharchen, L., Zaw, T., Waseem, M. & Jhala, Y (2024). Panthera pardus ssp. fusca (amended version of 2023 assessment). The IUCN Red List of Threatened Species 2024: e.T215195524A259032906. https://dx.doi.org/10.2305/IUCN.UK.2024-1.RLTS.T215195524A259032906.en

Sharife, K. (2022, October 26). Inside South Africa's brutal lion bone trade. Organised Crime and Corruption Reporting Project. *https://www.occrp.org/en/investigation/inside-south-africas-brutal-lion-bone-trade*

Snow Leopard Secretariat (2014, October, 23). Cat lovers across the world are celebrating the first International Snow Leopard Day on October 23rd. With range countries and the conservation community more committed than ever to saving this endangered cat, there is reason for hope. At the same time, shrinking habitats and prey numbers as well as poaching continue to threaten the remaining snow leopards. https://snowleopard.org/international-snow-leopard-day-hope-and-concern-for-the-cat/

Snow Leopard Trust (2024). Mitigating the Threat of Feral dogs to Snow Leopards. https://snowleopard.org/mitigating-the-threat-of-feral-dogs-to-snow-leopards/

State Council (Chinese government) (2018 a). Notice of the State Council on Strictly Controlling the Commercial Utilization of Rhinoceroses, Tigers, and Their Products. https://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm

State Council (Chinese government) (2018 b). China to continue strict bans on trading of rhino, tiger products. https://english.www.gov.cn/state_council/ministries/2018/12/13/content_281476431992209.htm

Stein, A.B., Gerngross, P., Al Hikmani, H., Balme, G., Bertola, L., Drouilly, M., Farhadinia, M.S., Feng, L., Ghoddousi, A., Henschel, P., Jhala, Y.V., Khorozyan, I., Kittle, A., Laguardia, A., Luo, S.-J., Mann, G., Miquelle, D., Moheb, Z., Raza, H., Rostro-García, S., Shivakumar, S., Song, D. & Wibisono, H. (2025). Panthera pardus (amended version of 2024 assessment). The IUCN Red List of Threatened Species 2025: e.T15954A274970607. https://dx.doi.org/10.2305/IUCN.UK.2025-1.RLTS.T15954A274970607.en

Spicer, J. & Grossman (2022). Targeting Profit: Non-Conviction based Forfeiture in Environmental Crime. Targeting Natural Resource Corruption (TNRC). https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/65px91isgl_R5_IO.pdf

The Phnom Penh Post (2022, June 7). Cambodia, Vietnam, Laos to up wildlife crime fight. https://asianews.network/cambodia-vietnam-laos-to-up-wildlife-crime-fight/

TRAFFIC (N.D.). Leopards: Protecting species from poaching and human/wildlife conflict. https://www.traffic.org/what-we-do/species/leopards/

TRAFFIC (2018) Reducing demand for illegal wildlife products: Research analysis on strategies to change illegal wildlife product consumer behaviour. https://www.traffic.org/site/assets/files/11081/demand_reduction_research_report.pdf

TRAFFIC (2019). Reducing demand for illegal wildlife: Designing effective messages. TRAFFIC International, Cambridge, UK. https://www.traffic.org/site/assets/files/17368/good-practice-guidelines-messages.pdf

TRAFFIC (2021). The prescription and consumption of illegal wildlife products in traditional medicine in Vietnam. https://www.traffic.org/site/assets/files/18916/traffic_-_infographic_tm_v8_08_29_final.pdf

TRAFFIC (2023) Online market monitoring report: From July 1, 2021 to June 30, 2023. https://www.traffic.org/site/assets/files/26050/traffic_stw_online_report_en_final_compressed-1.pdf

Tokubek Uulu, B., Musing L., Woolloff A., Musuraliev K., Kurmanov S., von Meibom S. (2024). An Assessment of Wildlife Trade in Central Asia. TRAFFIC. https://www.traffic.org/site/assets/files/23066/en_wildlife_trade_in_central_asia-compressed.pdf

REFERENCES

Uddin, N., Enoch, S., Harihar, A., Pickles, R.A., Highes, A.C. (2023). Tigers at a crossroads: Shedding light on the role of Bangladesh in the illegal trade of this iconic big cat. Conservation Science and Practice 5(7). https://doi.org/10.1111/csp2.12952

United Nations Office on Drugs and Crime (UNODC) (2017) Enhancing the Detection, Investigation and Disruption of Illicit Financial Flows from Wildlife Crime. https://www.unodc.org/roseap/uploads/archive/documents/Publications/2017/FINAL_-_UNODC_APG_Wildlife_Crime_report.pdf

United Nations Office on Drugs and Crime (UNODC) (2018) Guide on drafting legislation to combat wildlife crime. United Nations Publications, Vienna. https://cites.org/sites/default/files/eng/prog/iccwc/UNODC%20Guide%20on%20Drafting%20Legislation%20to%20Combat%20Wildlife%20Crime.pdf

United Nations Office on Drugs and Crime (UNODC) (2019) Transnational Organized Crime in Southeast Asia: Evolution, Growth, and Impact. https://www.unodc.org/roseap/uploads/archive/documents/Publications/2019/SEA_TOCTA_2019_web.pdf

United Nations Office on Drugs and Crime (UNODC) (2020). World Wildlife Crime Report 2020: Trafficking in Protected Species. Vienna: United Nations publications. https://www.unodc.org/documents/data-and-analysis/wildlife/2020/World_Wildlife_Report_2020_9July.pdf

United Nations Office on Drugs and Crime (UNODC) (2024). World Wildlife Crime Report 2024: Trafficking in Protected Species. Vienna: United Nations publications. https://www.unodc.org/cofrb/uploads/documents/ECOS/World_Wildlife_Crime_Report_2024.pdf

Van Uhm, D.P. & Zhang, M. (2022). Illegal wildlife trade in two special economic zones in Laos: Underground – open-sale fluctuations in the Golden Triangle borderlands. Frontiers in Conservation Science 3. https://doi.org/10.3389/fcosc.2022.1030378

Vietnam Law Magazine (2025, May 27). Internalization of CITES in Vietnam's wildlife protection law.

Vietnam Plus (2025, July 19). Vietnam and Cambodia sign cooperation agreement in forestry sector. https://www.vietnamplus.vn/viet-nam-va-campuchia-ky-ket-hop-tac-trong-linh-vuc-lam-nghiep-post965614.vnp

Villalva, P. and Moracho, E. (2019). Tiger trade threatens big cats worldwide. Science 364,743 743. DOI:10.1126/science.aax5200

Vu, A.N. (2023) Demand reduction campaigns for the illegal wildlife trade in authoritatian Vietnam: Ungrounded environmentalism. World Development 164. https://doi.org/10.1016/j.worlddev.2022.106150

Vu, H.N.D., Gadbert, K., Nielsen, J.V., Nielsen, M.R., & Jacobsen, J.B. (2022). The impact of a legal trade in farmed tigers on consumer preferences for tiger bone glue – Evidence from a choice experiment in Vietnam. Journal for Nature Conservation 65. https://doi.org/10.1016/j.jnc.2021.126088

Wildaid (2022, September 22). WildAid's new demand reduction campaign targets express shipping. https://wildaid.org/wildaids-new-demand-reduction-campaign-targets-express-shipping/

Wildcat Conservation Alliance (WCA) (2024, November 26). Turning the Tide on Wildlife Trade – New Laws and Fresh Hope for Sumatran Tigers. https://conservewildcats.org/2024/11/26/sumatran-tiger-law/#:~:text=Outlawing%20Wildlife%20trade%20using%20social,hearing%20because%20Evidence%20was%20found

Wildcat Conservation Alliance (WCA) (2025, February 25). How the USAID Funding Freeze Threatens Wildlife, Ecosystems, and Global Conservation Efforts.

Williams, V.L., Loveridge, A.J., Newton, D.J., & Macdonald, D.W. (2015). 'Skullduggery': Lions Align and This Mandibles Rock! PLoS ONE 10(11): e0135144. https://doi.org/10.1371/journal.pone.0135144

Williams, V.L., Loveridge, A.J., Newton, D.J., & Macdonald, D.W. (2017). A roaring trade? The legal trade in Panthera leo bones from Africa to East-Southeast Asia. PLoS ONE 12(10): e0185996. https://doi.org/10.1371/journal.pone.0185996

Williams VL, Loveridge AJ, Newton DJ, Macdonald DW (2017). Questionnaire survey of the pan-African trade in lion body parts. PLoS ONE 12 (10): e0187060. https://doi.org/10.1371/journal. pone.0187060

Weslow, R. (2020, August 21). Lion bone trade: The end of the lion's roar? African Wildlife Foundation. https://www.awf.org/news/lion-bone-trade-end-lions-roar

Wildlife Justice Commission (WJC) (2022). To skin a cat: how organised crime capitalises and exploits captive tiger facilities. https://wildlifejustice.org/wp-content/uploads/2022/11/To-Skin-A-Cat-Report-SPREADS-V06.pdf

Wildlife Justice Commission (WJC) (2023). Dirty Money: The Role of Corruption in Enabling Wildlife Crime. https://wildlifejustice.org/wp-content/uploads/2023/07/corruption-report-2023-SPREADS-V12.pdf

Wildlife Justice Commission (WJC) (2025 a). Is wildlife trafficking being treated as serious crimes? - A review of criminal offences, penalties, and implementation of the United Nations Convention against Transnational Organized Crime. https://wildlifejustice.org/wp-content/uploads/2025/09/is-wildlife-trafficking-being-treated-as-serious-crime-v5.pdf

Wildlife Justice Commission (WJC) (2025 b). Disruption and Disarray: An analysis of pangolin scale and ivory

REFERENCES

trafficking, 2015-2024. Wildlife Justice Commission. https://wildlifejustice.org/wp-content/uploads/2025/04/disruption-and-disarray-report-march-2025-v11-pages.pdf

Wildlife Trust of India. (2024, December 12). 20 get three years imprisonment for hunting Asiatic lions. https://www.wti.org.in/news/20-get-three-years-imprisonment-for-hunting-asiatic-lions/

Wingard J., Pascual M. (2018). Following the Money: Wildlife crimes in anti-money laundering laws. Legal Atlas. Available at https://www.legal-atlas.com/legal-atlas-publications.html

Wingard, J., Stivanello, V., Sohl, H., & Henry, L. (2025). Law of the Tiger: A Comparative Study of the Laws Governing Tiger Trafficking in 12 Tiger Range States. A Legal Atlas, WWF and TRAFFIC report.

Wong, R. & Krishnasamy, K. (2019). Skin and bones Unresolved: An analysis of tiger seizures from 2000-2018. TRAFFIC International. https://www.traffic.org/site/assets/files/12344/skin_and_bones_unresolved-web-1.pdf

Wong, R. and Krishnasamy, K. (2022). Skin and Bones: Tiger Trafficking Analysis from January 2000 – June 2022. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Selangor, Malaysia. https://www.traffic.org/site/assets/files/19714/skin_and_bones_tiger_trafficking_analysis_from_january_2000_to_june_2022_r7.pdf

World Bank (2015, April 29). Lao PDR extends environmental protection with US$15 million additional World Bank financing. https://tinyurl.com/yxdy32k4

World Wildlife Fund (WWF) (N.D a.). Keeping tigers wild: How can we break the chains of captivity? https://www.worldwildlife.org/pages/big-cat-public-safety-act

World Wildlife Fund (WWF) (N.D. b). China's best practices in combatting illegal wildlife trade. https://webadmin.wwfchina.org/storage/files/China's_Best_Practices_in_Combating_Illegal_Wildlife_Trade.pdf

World Wildlife Fund (WWF). (N.D. c). Saving threatened wildlife in Viet Nam. https://www.worldwildlife.org/projects/saving-threatened-wildlife-in-viet-nam

World Wildlife Fund (WWF) Asia-Pacific. (2021). Going viral: Myanmar's wildlife trade escalates online. https://wwfasia.awsassets.panda.org/downloads/wwf_online_trade_ii___v2_2.pdf

World Wildlife Fund (WWF) (2024 a, February 22). Improving captive tiger management in Viet Nam. https://www.worldwildlife.org/stories/improving-captive-tiger-management-in-viet-nam

World Wildlife Fund (WWF) (2024 b). Reducing tiger trade: Closing captive tiger facilities of concern. https://wwftigers.shorthandstories.com/2024-tigers-alive-annual-report/end-exploitation/index.html#:~:text=This%20guidance%20provides%20detailed%20information,the%20national%20context%20as%20needed.

World Wildlife Fund (WWF) (2024 c, May 27). Working together to combat wildlife crimes in South Asia. https://mongolia.panda.org/en/?385459/Working-together-to-combat-wildlife-crimes-in-South-Asia

World Wildlife Fund (WWF) (2025). C2C: Conflict to coexistence approach. https://tinyurl.com/3u4msfta

Wildlife Crime Control Bureau (WCCB) (N.D.). Who we are. http://www.wccb.gov.in/Content/AboutUs.aspx

Williams, V.L., Newton, D.J., Loveridge, A.J. and Macdonald, D.W. (2015). Bones of Contention: An Assessment of the South African Trade in African Lion Panthera leo Bones and Other Body Parts. TRAFFIC, Cambridge, UK & WildCRU, Oxford, UK

Xia, X., Li, F., Fan, J., Li, Y., Gong, J., Wang, X., Barran, L.R., Liang, Y., Zhu, Y., Shi, K. (2025). Potential Disturbance to Native Carnivore Community Caused by Stray Dogs in the Helan Mountains against the Background of Snow Leopard Reintroduction. Journal of Resources and Ecology 6(2), 593-602 https://doi.org/10.5814/j.issn.1674-764x.2025.02.02

Xihua (2018, November 2). Full transcript: State Council Executive Deputy Secretary-General Ding Xuedong Answers Media Questions. http://www.china.org.cn/china/Off_the_Wire/2018-11/12/content_71941870.htm

Zakharenka, A., Sharma, K., Kochorov, C., Rutherford, B., Varma, K., Seth, A., Kushlin, A., Lumpkin, S., Seidensticker, J., Laporte, B., Tichomirow, B., Jackson, R., Mishra, C., Abdiev, B., Modaqiq, W., Wangchuk, S., Zhongtian, Z., Khanduri, S., Duisekeyev, B., & Yunusov, N. (2016). The Global Snow Leopard and Ecosystem Protection Program. Snow Leopards, 559-573. DOI:10.1016/B978-0-12-802213-9.00045-6

Zoological Society of London (ZSL) (N.D.). Asiatic lion conservation. https://www.zsl.org/what-we-do/projects/protecting-asiatic-lions-in-the-gir-forest

ANNEXES

ANNEXES

ANNEX I: CITES LEGISLATION CRITERIA

Parties' domestic legislation must provide them the authority to:

1. Designate at least one Management Authority and one Scientific Authority
2. Prohibit trade in specimens in violation of the Convention
3. Penalise such trade
4. Confiscate specimens illegally traded or possessed

Based on this criteria, Parties' legislative progress for the implementation of CITES is reviewed and classified in one of three Categories:

- Category 1: legislation that is believed generally to meet all four requirements for effective implementation of CITES
- Category 2: legislation that is believed generally to meet one to three of the four requirements for effective implementation of CITES
- Category 3: legislation that is believed generally not to meet any of the four requirements for effective implementation of CITES

ANNEX II: CITES ABC LEGISLATIVE AND REGULATORY MEASURES AND GUIDANCE

CITES ABC LEGISLATIVE AND REGULATORY MEASURES AND GUIDANCE (2025)

SOURCE	MEASURE
Resolution Conf 12.5 [Rev. CoP19] (Measure)	All Parties and non-Parties, especially range and consumer States of ABC species, to adopt comprehensive legislation or... review existing legislation to ensure that there are provisions for deterrent penalties and that it addresses illegal trade in and/or possession of illegally traded specimens of native and non-native Asian big cat species as well as products (1a) All Parties in whose jurisdiction there is a legal domestic market... take all necessary legislative, regulatory and enforcement measures to close their domestic markets for commercial trade in tiger and other Asian big cat specimens (1c)
Decision 18.106 (Measure)	Consumer States of specimens from tiger and other Asian big cat species are urged to take action to end demand for illegal tiger and other big cat parts and derivatives by (...) adopting and implementing appropriate legislative and regulatory measures, to deter consumers from purchasing any illegal big cat products.
Decision 14.69 (Measure)	Parties with intensive operations breeding tigers on a commercial scale shall implement measures to restrict the captive population to a level supportive only to conserving wild tigers; tigers should not be bred for trade in their parts and derivatives.
BCTF Outcome Document (Guidance)	Strengthen effective implementation and enforcement of the Convention with regards to illegal trade in big cat specimens (Section 1) • In recognition of the importance of comprehensive legislation related to big cat species in trade, consider amending national regulations to address illegal trade in big cats in relation to non-native/exotic species, hybrid animals bred in captivity, and regulations to prevent trade in readily recognizable derivatives.

ANNEX II: CITES ABC LEGISLATIVE AND REGULATORY MEASURES AND GUIDANCE CONT.

SOURCE	MEASURE
BCTF Outcome Document	Strengthen regulation of facilities breeding big cats in captivity to prevent and detect any illegal trade from such facilities and deploy strengthened enforcement measures, urging Parties to (Section 2): • If they have not already done so, develop in consultation with relevant stakeholders, adopt and implement national legislation and protocols to regulate breeding of big cats in captivity to prevent any illegal activities that could be associated with such facilities, including by: • requiring licensing (subject to regular renewal) of each facility breeding big cats and establishing a national register of big cat breeding facilities, including marking for identification and registration of each ndividual big cat (for example by using photos, microchips, DNA samples) and their history (origin/ affiliation, transfer, reproduction, death and disposal); • addressing husbandry and welfare conditions based on national and international guidance and best practices for keeping big cats in captivity; • taking into consideration the purpose of breeding, contribution to conservation and adequacy of management of the facility when considering any applications for licenses and evaluating and monitoring existing facilities; • undertaking regular inspections, monitoring and audits of big cat breeding facilities as well as conducting unannounced spot checks by authorized personnel, based on established procedures/protocols; • establishing protocols for the disposal of big cat specimens (...) and eeping accurate record of such disposal (...)"

ANNEX III: CITES ABC LAW ENFORCEMENT MEASURES AND GUIDANCE

CITES ABC LAW ENFORCEMENT MEASURES AND GUIDANCE (2025)

SOURCE	MEASURE
Resolution Conf 12.5 [Rev. CoP19] (Measure)	All Parties (...) to introduce innovative enforcement methods, e.g., anti-money laundering approaches, forensic analytical techniques, intelligence-led enforcement, working with internet and transportation companies, and (...) strengthen enforcement efforts in key border regions (1d) All range States (...) to ensure enforcement units and personnel receive relevant and effective support in anti-poaching operations; the gathering and use of intelligence; targeting offenders; wildlife crime investigative techniques; collecting evidence; inter-agency liaison and cooperation; and preparing cases for prosecution (1f) Parties and non-Parties (...) keeping tigers and other ABC species in captivity to ensure adequate management practices and controls are in place to prevent ABC parts and derivatives from entering illegal trade from or through [captive] facilities (1h) All parties (...) to share images of seized tiger skins with national focal points or agencies in tiger range States (...) so as to identify the origin of illegal specimens (1l) Work with ICCWC partners (...) to improve cooperation and a multidisciplinary approach in the detection, investigation, and prosecution of crimes related to ABC (2b) Range States of (...) ABC species ensure anti-poaching teams (...) are effectively resourced (...) and intelligence is shared between relevant enforcement agencies (3a) All range and consumer States take measures to increase awareness of wildlife crime and illicit wildlife trade among their enforcement, prosecution and judicial authorities (3c) Enforcement agencies in range and consumer States of (...) ABC species establish cooperative bilateral and multilateral arrangements (...) in order to achieve more effective control of illegal international trade in specimens of Asian big cat species (3d) Countries and organisations with relevant expertise to encourage and support States (...) in the development of practical identification manuals to aid the detection and accurate identification of parts and derivatives of ABCs (4a)
Resolution Conf 12.5 [Rev. CoP19] (Measure)	Parties affected by illegal trade in ABC (...) pursue enforcement efforts to address this illegal trade, including through the initiation of joint investigations and operations aimed at halting the members of organized crime networks across the entire illegal trade chain
Resolution Conf 12.5 [Rev. CoP19] (Measure)	Parties, in whose territory tourist markets exist that are contributing to illegal cross border trade involving ABC specimens, are encouraged to strengthen law enforcement cooperation with their neighbouring Parties to target such illegal trade

ANNEX III: CITES ABC LAW ENFORCEMENT MEASURES AND GUIDANCE CONT.

SOURCE	MEASURE
Decision 18.103 (Rev. CoP19)	All Parties (...) are encouraged to share images (of seized tiger skins)
Decision 18.05 (Measure)	Parties (...) are encouraged to take serious consideration of the concerns regarding illegal trade in leopard parts and derivatives (...)
Outcome Document (Guidance)	Strengthening the enforcement of the Convention (Section 1), • establish or strengthen multi-agency units consisting of vetted staff from government agencies responsible for wildlife law enforcement, e.g., customs, police, forest and wildlife authorities, and prosecutors to address illegal trade and trafficking of specimens of big cat species, in line with Resolution Conf. 11.3 (Rev. CoP19) on Compliance and enforcement and Resolution Conf. 18.6 on Designation and role of Management Authorities • ensure adequate resources and capacities to enforce legislation addressing illegal trade in big cat specimens including by · sensitising prosecutors and judges s · trengthening capacity of law enforcement officers to use innovative law enforcement and investigative meth\ and techniques addressing corruption risks by agreeing to: • pursue the implementation of Resolution Conf. 17.6 (Rev. CoP19) on Prohibiting, preventing, detecting and countering corruption, which facilitates activities conducted in violation of the Convention • undertake risk assessments to identify high corruption risk areas • pursue enhancing collaboration between relevant government agencies, civil society organisations, and other relevant stakeholders

ANNEX III: CITES ABC LAW ENFORCEMENT MEASURES AND GUIDANCE CONT.

SOURCE	MEASURE

Outcome Document (Guidance)	Strengthening regional and international collaboration (Section 5)
	• Developing MoUs or similar agreements to facilitate transboundary monitoring and intelligence-sharing, collaboration, and information exchanges
	• Implement provisions of the UNTOC and provide mutual legal assistance to disrupt transnational organised crime
	• Take advantage of existing mechanism/ platforms for regional and international cooperation on illegal trade in big cats
	• Increase the use of Interpol secure communication channels and Notices to share and exchange information
	• Explore opportunities to engage with Interpol, the WCO, and other ICCWC partners
	• Facilitate analysis and timely operational activities by sharing information with source, transit, or destination countries as applicable on seizures involving big cat specimens
	• Make every effort to convene in global law enforcement operations
	• Explore opportunities to join existing or new platforms, such as the International Big Cat Alliance
	• Mobilise investigations into illicit financial flows from illegal trade in big cat species
	  • Implement national legislation to combat money laundering and facilitate asset forfeiture in cases associated with illegal trade in big cats and other serious crimes, and actively implement activities bringing together wildlife trade and money laundering expertise
	  • To the extent possible, ensure that there is adequate capacity to conduct financial investigations to quantify the value of illegal trade in big cats, and to identify international financial flows
	  • Increase awareness amongst national authorities about the importance of incorporating financial investigations

ANNEX IV: RESOLUTION 11.3 PROVISIONS ON ONLINE TRADE

ONLINE TRADE MEASURES - (RES. CONF. 11.3) RECOMMENDS PARTIES TO

16 c appoint national points of contact with knowledge and training in online investigations, evidence gathering, and prosecutions to serve as focal points for enquiries from other Parties and intergovernmental organizations;

16 d establish an ongoing national monitoring programme, and in conjunction with relevant experts, develop a list of CITES species that are most commonly found in illegal trade on digital and online platforms;

16 e identify key contacts at online technology and data companies who can facilitate the provision of information upon request from Parties in support of investigations;

16 f engage online platforms to: i) introduce and publish policies to address and prevent the use of such platforms for illegal trade in wildlife, including measures to ensure compliance with such policies; ii) ensure that such policies are presented clearly and visibly; and iii) encourage them to inform their users about wildlife crime linked to the Internet, by using targeted alerts and other technology to make users aware of relevant laws and website policies;

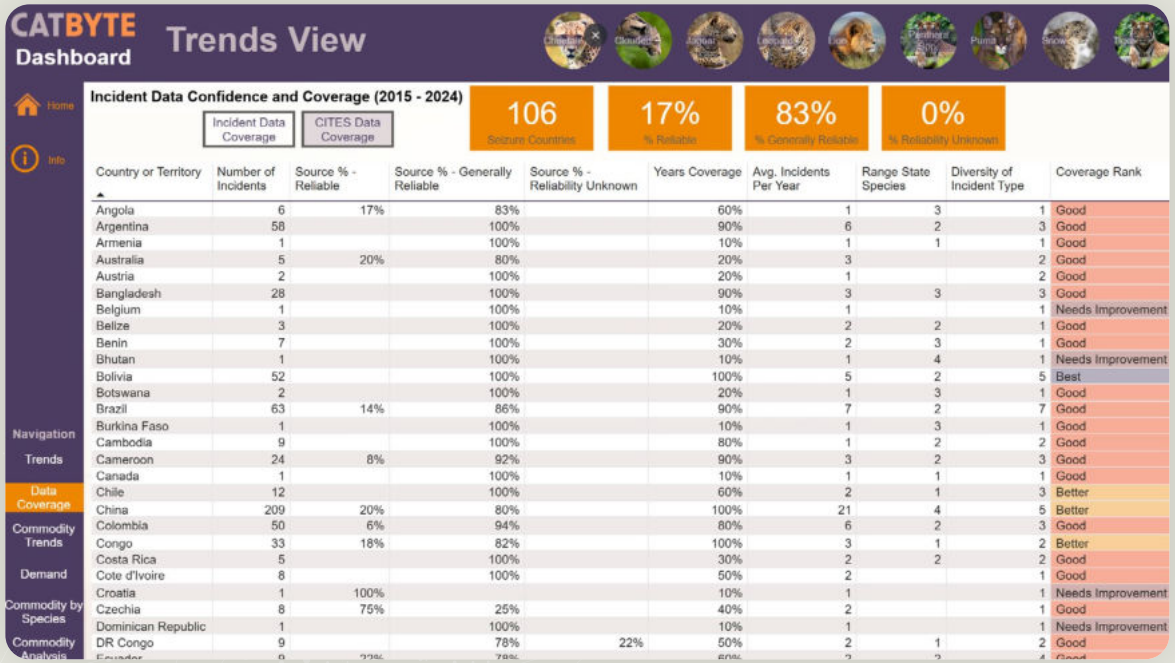
16 g raise awareness of wildlife crime linked to the Internet through public outreach and by engaging directly with online technology companies

ANNEX V: CITES ABC DEMAND REDUCTION AND EDUCATION MEASURES AND GUIDANCE

CITES ABC DEMAND REDUCTION MEASURES AND GUIDANCE (2025)

Source	Measure
Resolution Conf. 12.5 [Rev. CoP19] (Measures)	Carry out appropriate education and awareness campaigns directed at urban and rural communities and other targeted groups, on the ecological and cultural significance and the significance for ecotourism of Asian big cats, their prey and habitats (3b) Work with traditional medicine communities and industries to develop and implement strategies for gradually reducing and eventually eliminating the use of Asian big cat parts and derivatives (5a) Remove references to parts and derivatives of Appendix-I Asian big cats from the official pharmacopoeia and include acceptable substitute products that do not endanger other wild species, and introduce programmes to educate the industry and user groups in order to eliminate the use of substances derived from Appendix-I Asian big cats and promote the adoption of appropriate alternatives (5b) Carry out appropriate education and awareness campaigns to eliminate illegal trade in and use of ABC skins as trophies, ornaments and items of clothing or for the production of other materials (5c)
Decision 18.106 (Measure)	Consumer States of specimens from tiger and other ABC species are urged to take action to end demand for illegal tiger and other big cat parts and derivatives by working with relevant specialists such as consumer behaviour change, social marketing and communication experts to conduct targeted behaviour change initiatives
Outcome Document (Guidance)	Furthermore, the BCTF Outcome document contains a dedicated section to reducing demand to combat illegal trade in big cat specimens, where it is agreed that it is important for Parties to:

ANNEX VI CATBYTE ANALYSIS METHODOLOGY



Country or Territory	Number of Incidents	Source % - Reliable	Source % - Generally Reliable	Source % - Reliability Unknown	Years Coverage	Avg. Incidents Per Year	Range State Species	Diversity of Incident Type	Coverage Rank
Angola	6	17%	83%		60%	1	3	1	Good
Argentina	58		100%		90%	6	2	3	Good
Armenia	1		100%		10%	1	1	1	Good
Australia	5	20%	80%		20%	3		2	Good
Austria	2		100%		20%	1		2	Good
Bangladesh	28		100%		90%	3	3	3	Good
Belgium	1		100%		10%	1		1	Needs Improvement
Belize	3		100%		20%	2	2	1	Good
Benin	7		100%		30%	2	3	1	Good
Bhutan	1		100%		10%	1	4	1	Needs Improvement
Bolivia	52		100%		100%	5	2	5	Best
Botswana	2		100%		20%	1	3	1	Good
Brazil	63	14%	86%		90%	7	2	7	Good
Burkina Faso	1		100%		10%	1	3	1	Good
Cambodia	9		100%		80%	1	2	2	Good
Cameroon	24	8%	92%		90%	3	2	3	Good
Canada	1		100%		10%	1	1	1	Good
Chile	12		100%		60%	2	1	3	Better
China	209	20%	80%		100%	21	4	5	Better
Colombia	50	6%	94%		80%	6	2	3	Good
Congo	33	18%	82%		100%	3	1	2	Better
Costa Rica	5		100%		30%	2	2	2	Good
Cote d'Ivoire	8		100%		50%	2		1	Good
Croatia	1	100%			10%	1		1	Needs Improvement
Czechia	8	75%	25%		40%	2		1	Good
Dominican Republic	1		100%		10%	1		1	Needs Improvement
DR Congo	9		78%	22%	50%	2	1	2	Good

Figure 1. An example of CatByte's data confidence and coverage matrix

1.0 CATBYTE

CatByte is an analytical platform designed to assess the illegal trade and trafficking of big cats. It focuses on eight species - cheetahs, clouded leopards, jaguars, leopards, lions, pumas, snow leopards and tigers - using advanced analytics to uncover trends, patterns, and threats. CatByte can offer insights across all species of big cats, as well providing species-specific analytics.

CATBYTE'S DATA AND ANALYSIS

CatByte analyses wildlife crime data post-detection and because of this it is unlikely to capture the full scale of illegal trade due to inherent complexities in wildlife crime and trafficking. In addition, there are persistent challenges in reporting differences, enforcement inconsistencies, and geographical biases which may be present in these data.

Similarly, seizures may indicate stronger enforcement rather than higher levels of illegal trade and should be considered when interpreting this analysis.

DATA SOURCES

Go Insight maintains data-sharing relationships with key organisations, including EIA's Crime Tracker for Asian big cats, TRAFFIC Wildlife Trade Portal, and the Cheetah Conservation Fund. For region-specific insights, data has also been sourced from IFAW's Wildlife Crime in Hispanic America project.

To ensure transparency, the CatByte dashboard includes a Confidence and Coverage Matrix *(Figure 1)*, which assesses both the reliability of data sources and the breadth of reporting.

CONFIDENCE ASSESSMENT

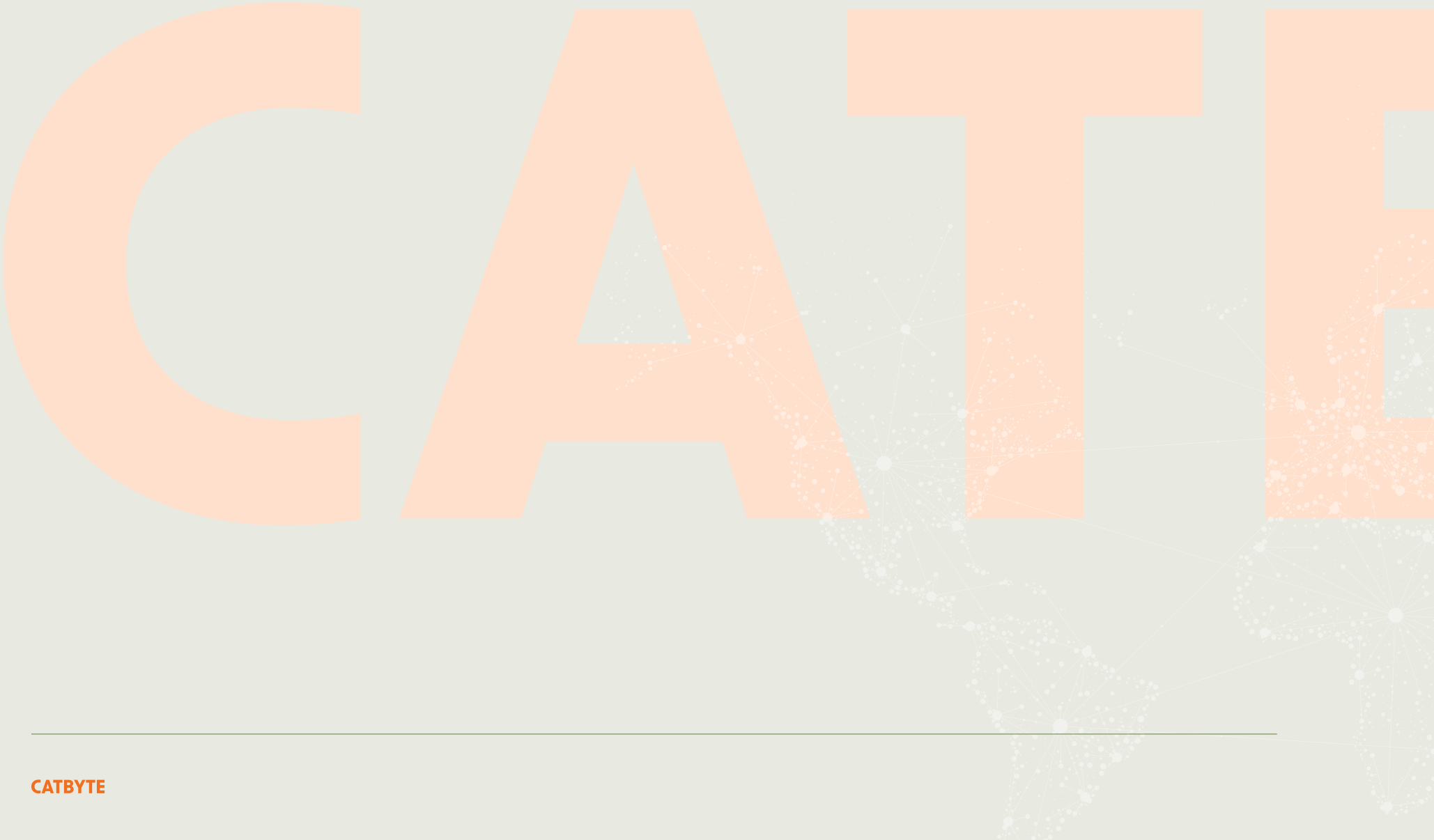
Each country's data is categorised by source reliability:

- Reliable: Verified by trusted authorities (e.g., government or custom agencies).
- Generally Reliable: Usually accurate (e.g., reputable news outlets).
- Reliability Unknown: May contain inconsistencies or biases (e.g., blogs, unverified social media).

For data categorised as Generally Reliable, efforts are made to cross-verify reports to add an extra layer of corroboration where possible.

COVERAGE CONSIDERATIONS

The matrix highlights reporting gaps and the most recent CITES data submission per country, supporting the analysis of legal trade. A country with high coverage - such as Mexico - may report more incidents, not necessarily due to higher crime levels but potentially because of improved enforcement and / or reporting. By assessing both source reliability and reporting coverage, CatByte ensures its analysis and the sources of information that inform it is as transparent as possible.



BYTE

THE TRADE IN ASIAN BIG CATS:

An Analysis of Trends, Threats, Measures and Strategies

2000-2024