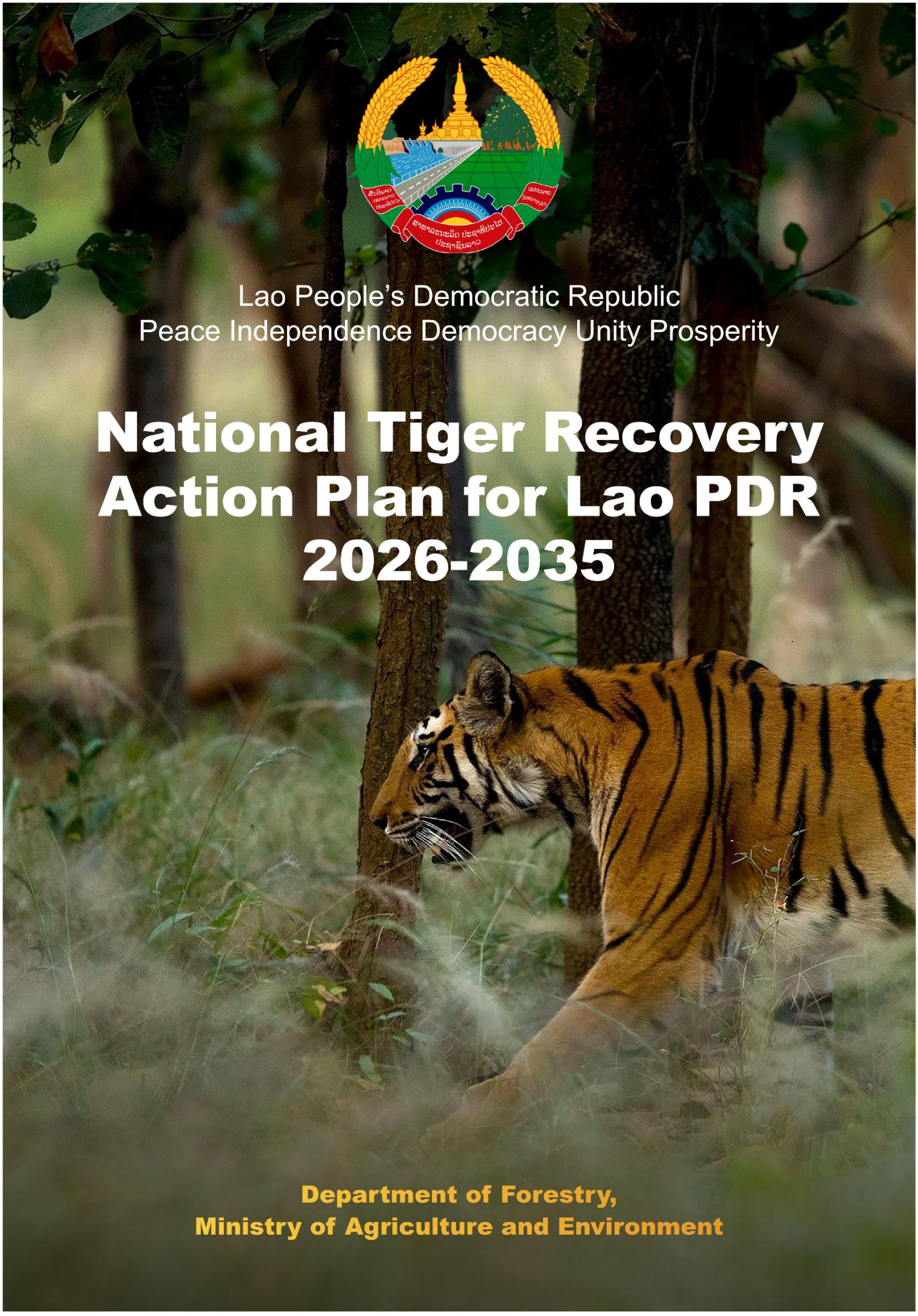

Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

National Tiger Recovery Action Plan for Lao PDR 2026-2035

Department of Forestry,
Ministry of Agriculture and Environment

Ministry of Agriculture and Environment

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Front and back cover photo: A wild female tiger in Pench National Park, Madhya Pradesh, India.

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ກະຊວງກະສິກຳ ແລະ ສິ່ງແວດລ້ອມ ເລກທີ: /ກສ

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ: 03 MAR 2026

ຂໍ້ຕົກລົງ
ວ່າດ້ວຍ ການຮັບຮອງ ແລະ ປະກາດໃຊ້ ແຜນດຳເນີນງານຟື້ນຟູເສືອໂຄ່ງແຫ່ງຊາດ ຂອງ ສປປ ລາວ ໄລຍະປີ 2026-2035

- ອີງຕາມ ກົດໝາຍ ວ່າດ້ວຍສັດປ່າ (ສະບັບປັບປຸງ) ສະບັບເລກທີ 42/ສພຊ, ລົງວັນທີ 17 ກໍລະກົດ 2023;
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ລັດຖະມົນຕີກະຊວງກະສິກຳ ແລະ ສິ່ງແວດລ້ອມ ອອກຂໍ້ຕົກລົງ:

ມາດຕາ 1 ເຫັນດີຮັບຮອງ ແລະ ປະກາດໃຊ້ "**ແຜນດຳເນີນງານຟື້ນຟູເສືອໂຄ່ງແຫ່ງຊາດ ຂອງ ສປປ ລາວ ໄລຍະປີ 2026-2035**"

ມາດຕາ 2 ມອບໃຫ້ ກົມປ່າໄມ້, ກົມກວດກາຊັບພະຍາກອນທຳມະຊາດ ແລະ ສິ່ງແວດລ້ອມ ແລະ ກົມລ້ຽງສັດ ແລະ ການປະມົງ ເປັນເຈົ້າການສົມທົບກັບພາກສ່ວນທີ່ກ່ຽວຂ້ອງ ທັງສູນກາງ ແລະ ທ້ອງຖິ່ນ ຈັດຕັ້ງປະຕິບັດ ແຜນດຳເນີນງານຟື້ນຟູເສືອໂຄ່ງແຫ່ງຊາດ ຂອງ ສປປ ລາວ ໄລຍະປີ 2026-2035 ໃຫ້ໄດ້ຮັບຜົນດີ.

ມາດຕາ 3 ຫ້ອງການ, ບັນດາກົມ, ສະຖາບັນ, ສູນ, ກອງອ້ອມຂ້າງກະຊວງ, ພະແນກກະສິກຳ ແລະ ສິ່ງແວດລ້ອມ ແຂວງ, ຫ້ອງການກະສິກຳ ແລະ ສິ່ງແວດລ້ອມເມືອງ, ນະຄອນ ແລະ ພາກສ່ວນທີ່ກ່ຽວຂ້ອງ ຈົ່ງຮັບຮູ້ ໃຫ້ຄວາມຮ່ວມມື ແລະ ຈັດຕັ້ງປະຕິບັດແຜນດຳເນີນງານດັ່ງກ່າວ ໃຫ້ໄດ້ຮັບຜົນດີ.

ມາດຕາ 3 ຂໍ້ຕົກລົງສະບັບນີ້ ມີຜົນສັກສິດນັບແຕ່ວັນລົງລາຍເຊັນເປັນຕົ້ນໄປ.

ລັດຖະມົນຕີ

ກະຊວງກະສິກຳ ແລະ ສິ່ງແວດລ້ອມ ລັດຖະມົນຕີ

ປອ. ຈິນດຳ ດວງສະຫວັນ

PREFACE

Department of Forestry (DOF), representing the Ministry of Agriculture and Environment of the Lao People's Democratic Republic is honored to present the National Tiger Recovery Action Plan for Lao PDR (2026–2035). This Plan reflects the Government's renewed commitment to restoring tiger landscapes and rebuilding the ecological and institutional foundations required for the long-term recovery of wild tigers in the country.

The National Tiger Recovery Action Plan (NTRAP) has been developed in compliance with national policies and international commitments. It is fully aligned with the Global Tiger Recovery Program (GTRP) 2026–2034, endorsed by all Tiger Range Countries, and the National Biodiversity Strategy and Action Plan (NBSAP) 2026–2030, which implements Lao PDR's obligations under the Convention on Biological Diversity and the Kunming–Montreal Global Biodiversity Framework. The Plan also complements key national strategies, including the National Forestry Strategy to 2035 and Vision to 2050, the National Green Growth Strategy, and the 10th National Socio-Economic Development Plan (2026–2030).

Lao PDR was historically part of the natural range of the Indochinese tiger (Panthera tigris corbetti). Although tigers are currently considered functionally extinct within the country, Lao PDR retains extensive forest landscapes, important prey species, and strategic transboundary connectivity with neighboring countries that support viable tiger populations. These conditions provide a strong ecological basis for future recovery through habitat restoration, prey-base recovery, effective law enforcement, and strengthened regional cooperation.

Recognizing this opportunity, the National Tiger Recovery Action Plan adopts a recovery-oriented approach, shifting from the protection of remnant populations to the restoration of landscapes capable of supporting future natural recolonization. The Plan prioritizes the reduction of poaching and illegal wildlife trade, the recovery of prey populations, improved governance and management of protected areas, community participation, and enhanced transboundary collaboration, in line with the objectives of the GTRP.

The Plan was developed through a participatory process involving government agencies, provincial authorities, protected area managers, technical experts, civil society organizations, and development partners. This inclusive approach ensures national ownership, scientific rigor, and practical feasibility for implementation.

The Department of Forestry (DOF), Ministry of Agriculture and Environment calls upon all relevant sectors, local authorities, communities, and development partners to collaborate in implementing this Plan. Through coordinated action and sustained commitment, Lao PDR can restore its tiger landscapes, strengthen biodiversity conservation, and contribute meaningfully to global efforts to secure the future of wild tigers for present and future generations.

Department of Forestry

Assoc.Prof.Dr. Somvang PHIMMAVONG

ACKNOWLEDGEMENTS

The Department of Forestry (DOF) extends its sincere appreciation to all institutions and individuals who contributed to the development of the National Tiger Recovery Action Plan for Lao PDR (2026–2035).

The Department of Forestry, the Ministry of Agriculture and Environment expresses its special gratitude to the Division of Wildlife Management and CITES for its leadership and technical guidance throughout the planning process. The Division of Wildlife Management and CITES played a central role in coordinating inter-agency inputs, facilitating technical consultations, reviewing draft documents, and ensuring that the Plan is fully aligned with national forestry, wildlife, and protected area policies.

The Department of Forestry, Ministry of Agriculture and Environment also gratefully acknowledges the technical and financial support provided by WWF-Laos, which was instrumental in enabling the development of this Plan. WWF-Laos provided valuable technical expertise, scientific data, and analytical inputs on tiger conservation, law enforcement, prey recovery, landscape connectivity, and transboundary conservation. Financial support from WWF-Laos made possible stakeholder consultations, technical workshops, and drafting processes that ensured the Plan is evidence-based, practical, and aligned with international best practices.

Appreciation is further extended to relevant departments within the Ministry of Agriculture and Environment, including national and provincial protected area authorities, whose contributions, field experience, and operational insights strengthened the realism and implementability of the Plan.

The Department of Forestry, Ministry of Agriculture and Environment acknowledges the constructive inputs provided by provincial and district authorities, protected area management teams, technical experts, and conservation practitioners who participated in consultations and reviews. Their knowledge of local conditions, challenges, and opportunities greatly enhanced the quality and relevance of the Plan.

The Department of Forestry also recognizes the continued collaboration of development partners and conservation organizations supporting biodiversity conservation and wildlife protection in the country. Their long-term engagement has helped build the institutional, technical, and financial foundations upon which this National Tiger Recovery Action Plan is based.

Finally, the Department of Forestry, Ministry of Agriculture and Environment expresses its appreciation to all stakeholders whose collective efforts have contributed to the preparation of this Plan. Their commitment and cooperation are essential for the successful implementation of the National Tiger Recovery Action Plan and for the long-term restoration of tiger landscapes and biodiversity in Lao PDR.

Department of Forestry

Assoc.Prof.Dr. Somvang PHIMMAVONG

Executive Summary

Lao People Democratic Republic (Lao PDR), once part of the historical stronghold of the Indochinese tiger (*Panthera tigris corbetti*), is now considered functionally extinct for the species. However, because the country still supports large, relatively intact forest blocks, including biologically rich transboundary landscapes, along with viable populations of key prey species, and geographic proximity to source populations in Thailand, Lao PDR retains a strategically important ecological foundation for future natural recolonization.

In light of the species' functional extinction in Lao PDR, the revised National Tiger Action Plan marks a strategic shift, from protecting an existing population to establishing the ecological and institutional foundations necessary for future natural recolonization. The updated plan, now renamed the **National Tiger Recovery Action Plan (NTRAP)**, prioritizes landscape restoration, the recovery of prey populations, and the strengthening of transboundary cooperation, particularly with Thailand's Western Forest Complex, a key stronghold for wild tigers. The plan reflects this paradigm by prioritizing TCLs with high connectivity potential, especially Nam Poui National Protected Area (NPA), due to its strategic location adjacent to source populations in Thailand. It holds high potential for facilitating natural tiger dispersal.

Aligned with the goals of the Global Tiger Recovery Program, this forward-looking plan seeks to re-establish viable tiger populations within Lao PDR's historical range. Recognizing the current absence of breeding tigers in the country, the plan adopts a realistic and forward-thinking approach, focusing on ecological restoration, rebuilding prey populations, and enhancing connectivity with Thailand's Western Forest Complex.

The plan addresses persistent challenges in enforcement and institutional effectiveness, including:

- Weak anti-poaching efforts and limited patrolling coverage.
- Inadequate capacity and resources within protected areas.
- Limited inter-agency coordination.
- Limited transboundary cooperation with neighboring countries.
- Limited financial support.
- Cross-border illegal wildlife trafficking.

Strategic interventions include:

- Enhancing habitat quality and ecological connectivity, particularly in border areas such as **Nam Poui NPA**, which shares a boundary with Thailand's tiger range.
- Rebuilding populations of key prey species to support future tiger recolonization.
- Strengthening law enforcement and anti-poaching measures.
- Building institutional capacity and improving protected area governance.
- Mobilizing sustainable conservation financing and fostering technical partnerships.

Through targeted interventions to overcome these barriers, the updated plan lays the foundation for a renewed national effort to bring tigers back to Lao PDR's forests and landscapes. Together, these actions aim to create safe, connected, and ecologically viable landscapes capable of supporting the long-term recovery and persistence of wild tigers in Lao PDR.

The NTRAP presents a comprehensive strategy to re-establish viable tiger populations in Lao PDR through habitat restoration, prey base recovery, protection of ecological corridors, and

strengthened transboundary cooperation. The plan categorizes TCLs into two priority levels: Priority 1 and Priority 2.

Priority 1 TCLs, led by Nam Poui National Protected Area, are the principal focus for enabling the natural return of tigers from neighboring source populations, particularly from Thailand's Western Forest Complex. Key conservation actions in these landscapes include:

- Strengthening transboundary coordination mechanisms with Thai counterparts, including knowledge sharing, capacity building, intelligence sharing, and coordinated law enforcement.
- Enhancing patrol coverage and effectiveness through SMART-based monitoring and well-trained ranger teams.
- Securing core habitats and critical corridors through zoning, threat mitigation, and habitat management.
- Supporting community engagement initiatives to reduce human-wildlife conflict and promote conservation incentives.
- Establishing monitoring systems to detect tiger presence, movement, and prey trends using camera traps, genetic sampling, and field surveys.
- Mobilizing sustainable conservation financing and fostering technical partnerships.

Priority 2 TCLs, including Nam Et–Phou Louey in the north, Nakai-Nam Theun in the central and Xe Pian in the south, are targeted for long-term recovery interventions aimed at restoring suitable habitat conditions, rebuilding prey populations, and strengthening ecological connectivity within the country. These landscapes are intended to support the future dispersal and range expansion of tigers within the country, building on progress made in Priority 1 areas. Conservation actions in these areas include:

- Restoring prey populations through improved protection and targeted recovery programs.
- Identifying and securing key corridors and stepping-stone habitats to support long-distance dispersal.
- Implementing habitat improvement interventions, such as grassland and salt lick management, and fire control.
- Enhancing community-based conservation programs to promote sustainable livelihoods and reduce reliance on forest resources.
- Integrating tiger conservation into spatial planning and land-use policies to prevent habitat fragmentation.
- Mobilizing sustainable conservation financing and fostering technical partnerships.

The National Tiger Recovery Action Plan (NTRAP) envisions "A Lao PDR with a large, functional, and connected forest ecosystem where tigers and their prey species are restored, enhanced, and protected, providing sustainable social, economic, and environmental benefits to the people of Laos."

The primary goal is to re-establish conditions for the natural recolonization and long-term survival of wild tigers in Lao PDR by 2035 through habitat restoration, prey base recovery,

strengthened protection, and transboundary cooperation with countries hosting source populations.

To achieve this vision and goal, the NTRAP identifies eight strategic objectives for implementation over the next decade:

- Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) to support dispersing tigers.
- Recover and sustain healthy prey populations to facilitate tiger occupancy and natural return.
- Strengthen protection and law enforcement capacity in priority landscapes to ensure tiger safety upon arrival.
- Enhance transboundary collaboration for tiger conservation, particularly with Thailand, to enable natural tiger movement.
- Build local support and readiness for the natural return of tigers.
- Establish a robust monitoring, research, and adaptive management system.
- Develop sustainable financing mechanisms to support long-term tiger conservation.
- Strengthen institutional capacity for effective implementation and governance.

The Plan shall be implemented at national, local, and site levels. At the national level, focus shall be on inter-agency coordination, capacity building, integration with national development strategies, transboundary cooperation, legislative alignment, and engagement with international partners. At the local level (i.e., landscape), provincial and district authorities shall integrate the Plan into spatial planning, promote conservation awareness, and control wildlife trafficking. At the site level, national protected areas shall implement site-specific interventions, including law enforcement, outreach, monitoring, community engagement, and sustainable livelihood activities, in coordination with government agencies and local communities.

Strategic Framework for National Tiger Recovery Action Plan 2026-2035.

Strategic Objective 1: Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) for dispersing tigers

SA1	Designate and manage Tiger Recovery Zones (TRZs) in Nam Poui NPA and other priority TCLs.
SA2	Conduct detailed habitat suitability and connectivity assessments, including forest cover mapping, to prioritize areas for restoration.
SA3	Minimize human disturbance in TRZs by restricting livestock grazing, illegal logging, and road expansion
SA4	Establish strict protection and core zones with limited access in TRZs, particularly in core abundant prey populations.
SA5	Prevent land-use conversion (e.g., agriculture, infrastructure) in core tiger and prey habitats.
SA6	Integrate tiger recovery goals into district and provincial land-use plans.

SA7	Collaborate with infrastructure developers to avoid and mitigate impacts on tiger habitats
SA8	Maintain low levels of anthropogenic mortality risks (poisoning, retaliatory killings) through awareness and rapid response protocols.

Strategic Objective 2: Recover and sustain healthy prey populations to support tiger occupancy/return.

SA9	Identify and prioritize key prey recovery areas within TRZs based on habitat suitability and proximity to corridors.
SA10	Conduct baseline surveys of key prey species (e.g., gaur, sambar, muntjac, wild pig) and monitor trends over time (i.e., population dynamics and density).
SA11	Enforce strict anti-poaching measures targeting snaring and illegal hunting of prey species through intensified patrolling and prosecution of wildlife crimes.
SA12	Establishing community-based no-hunting zones and conservation agreements.
SA13	Explore feasibility of prey reintroductions and translocations for key prey species, for example sambar and wild pig, where populations are low.
	Improve productivity of tiger prey through focussed habitat improvements including grassland restoration and salt-lick enhancements
SA14	Encourage natural prey dispersal by enhancing habitat quality across multiple sites.
SA15	Promote sustainable NTFP harvesting as an alternative to bushmeat hunting. Implement robust science-based behaviour change program to address motivations for urban and rural consumption of wildlife meat

Strategic Objective 3: Strengthen protection and law enforcement capacity in priority landscapes to ensure tiger safety upon arrival.

SA16	Increase patrolling coverage and effectiveness in Nam Poui NPA and other priority TCLs using SMART and other digital tools.
SA17	Deploy well-trained, equipped, and motivated law enforcement teams, including transboundary coordination units.
SA18	Target wildlife trafficking networks linked to prey and tiger parts through intelligence-based enforcement
SA19	Establish village-based wildlife guardians and support local enforcement collaborations.
SA20	Create rapid response teams to monitor and act on threats in real time.
SA21	Establish specialized anti-poaching units for priority areas with high threat levels.

SA22	Promote inter-agency coordination among DAFO, DOF, police, border patrols, and judiciary systems.
SA23	Secure sustainable financing for law enforcement (e.g., through conservation trust funds or REDD+ mechanisms).
SA24	Strengthen ranger training on wildlife laws, evidence handling, intelligence gathering, and threat response.

Strategic Objective 4: Enhance transboundary collaboration for tiger conservation, particularly with Thailand, to facilitate natural tiger movement.

SA25	Develop and implement a bilateral MoU between Lao PDR and Thailand for tiger conservation and monitoring.
SA26	Organize regular bilateral meetings and technical exchanges between Lao and Thai PA managers and researchers.
SA27	Coordinate joint corridor monitoring and camera trapping along national borders.
SA28	Facilitate data sharing and coordination between Lao and Thai wildlife authorities and research teams.
SA29	Harmonize enforcement protocols and conduct joint operations against cross-border wildlife crimes.
SA30	Engage with regional platforms like the Global Tiger Forum and ASEAN-WEN to support collaboration.

Strategic Objective 5: Build local support and readiness for natural tiger return.

SA31	Establish local conservation committees to co-manage wildlife and habitat restoration activities.
SA32	Conduct awareness campaigns in target villages near TRZs and corridors on tiger ecology, safety, and conservation benefits.
SA33	Establish Tiger-Friendly Villages with conservation agreements that prohibit hunting, reduce forest clearance, and allow community participation in monitoring.
SA34	Support sustainable, wildlife-compatible livelihoods (e.g., agroforestry, NTFPs, ecotourism, conservation incentive schemes).
SA35	Promote awareness and pride in tiger conservation through cultural programs, education, and media
SA36	Offer incentives and conservation-linked benefits (e.g., PES, community development funds).
SA37	Engage and train community members in camera trapping and reporting signs of tigers or their prey.
SA38	Prepare Human-Wildlife Conflict mitigation plans including compensation schemes, livestock enclosures, and rapid response teams.

Strategic Objective 6: Establish a robust monitoring, research, and adaptive management system.

SA39	Model habitat suitability and corridor effectiveness to guide investment in restoration and protection.
SA40	Monitor tiger dispersal and occupancy through camera trapping, genetic sampling, and community-based sightings.
SA41	Establish a central database for tracking tiger and prey data, threats, and enforcement actions.
SA42	Partner with research institutions to study tiger ecology, movement, and prey dynamics.
SA43	Develop and implement a long-term ecological monitoring framework to assess progress and adapt strategies.
SA44	Publish regular status reports to inform decision-makers, donors, and stakeholders.

Strategic Objective 7: Establish Sustainable Financing Mechanism

SA45	Develop a financial plan and cost estimate for tiger conservation (funding needs for PA man., current funding sources, gap, ad potential funding sources, e.g., trust funds, biodiversity offsets, PES).
SA46	Identify and map stakeholders (developers, NGOs, donors, privates).
SA47	Facilitate multi-stakeholder consultations to ensure buy-in and to clarify expectations, especially from the private sector and affected communities.
SA48	Formalize agreements with developers or Concession holders Negotiate terms and conditions of payment (timing, amount, penalties for non-compliance Ensure alignment with EIA/ESIA recommendations and government approval. Sign Memoranda of Understanding (MoU) or legal contracts between PA authority and project developers.
SA49	Establish Fund Governance and Financial Management System Create transparent governance structures, including multi-stakeholder representation (gov., local communities, private sector). Set financial management rules (e.g., auditing, procurement, disbursement, M&E).

Strategic Objective 8: Strengthening institutional capacity

SA50	Develop clear organizational structures, roles, and responsibilities for tiger recovery and enforcement at all levels (central, provincial, local), and ensure adequate staff with appropriate capacity
SA51	Establish inter-agency tiger conservation task forces or committees at national and local levels - National/local Tiger Recovery Committee and Technical Working Groups.
SA52	Facilitate regular coordination meetings and joint planning between government agencies and NGOs.
SA23	Training and Capacity Building: Conduct regular training programs on wildlife law enforcement, ecological monitoring, conflict resolution, and community engagement, wildlife crime investigation and prosecution.
SA54	Support mentoring and exchange programs with successful tiger range countries.
SA55	Ensure operational logistics and equipment (e.g., GPS, cameras, patrol gear, offices, vehicles)
SA56	Strengthen collaboration with NGOs, academic institutions, communities, and international partners.
SA57	Mainstream tiger conservation into development planning and environmental impact assessments.
SA58	Integrate tiger conservation into national biodiversity strategies (NBSAPs) and spatial development plans

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Acronyms/ Abbreviation

ASEAN	Association of Southeast Asian Nations
ADB	Asian Development Bank
BZ	Buffer Zone
CCA	Community Conservation Agreement
CITES	Convention for the trade of Endangered Species of Flora and Fauna
CUZ	Control Used Zone
EPF	Environment Protection Fund
EIA	Environment Impact Assessment
IEE	Environmental Examination
IWT	Illegal Wildlife Trade
GTRP	Global Tiger Recovery Program
GoL	Government of Laos
KM-GBF	Kunming-Montreal Global Biodiversity Framework
KFW	Kreditanstalt für Wiederaufbau, the German state-owned development bank
Lao PDR	Lao People Democratic Republic
IUCN	International Union for Conservation of Nature
NPA	National Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
NTAP	National Tiger Action Plan
NTRAP	National Tiger Recovery Action Plan
NEPL NPA	Nam Et Phou Loy National Protected Area
NPA	National Protected Area
PES	Payment For Ecosystem Service
PLUP	Participator Land Use Planning
SMART	Spatial Monitoring and Reporting Tool
TCL	Tiger Conservation Landscapes
TRC	Tiger Range Countries
TPZ	Totally Protected Zone
VDF	Village Development Fund
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature
WB	World Bank
WEFCOM	Western Forest Complex

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I. Background

1.1 Introduction

Over the past century, tigers (Panthera tigris) have undergone a severe contraction in both population size and geographic distribution across the world's 13 tiger range countries – Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand, and Viet Nam (Dinerstein et al., 2006). Today, they occupy only about 7% of their historical range in Asia. The most recent global assessment estimates 5,574 tigers remaining in the wild, representing a 74% increase since 2010, when populations were estimated at approximately 3,200 individuals (GTF 2023). Notably, tiger numbers have increased in several range countries, including Bhutan, China, India, Nepal, and Russia, due to strengthened conservation efforts over the past decade.

The species is currently classified as Endangered on the IUCN Red List of Threatened Species (IUCN 2021) and is included in CITES Appendix I, prohibiting international commercial trade. Tigers are now considered extirpated from Cambodia, Lao, Vietnam, large parts of China (including Fujian, Jiangxi, Guangdong, Zhejiang, Shaanxi, and Hunan), and the Korean Peninsula.

In Lao PDR, the tiger is legally designated as a Category I protected species under the National Wildlife Law. It is recognized as a national conservation priority due to its critical ecological role as an apex predator and its contribution to maintaining the integrity and functionality of natural forest ecosystems. Healthy tiger landscapes provide substantial ecosystem services, including freshwater regulation, biodiversity conservation, and the provision of food and other resources to local communities. Thus, tiger conservation delivers simultaneous ecological, social, and economic benefits, reinforcing the principle that conserving tigers also supports human well-being1.

Recognizing the global urgency of tiger conservation, all tiger range countries have committed to reversing the species' decline. At the 2010 St. Petersburg Tiger Summit**,** governments adopted the Global Tiger Recovery Program (GTRP) and the shared goal of doubling wild tiger numbers by 2022 (TX2)**.** In 2010, the Government of Lao PDR, as one of the last countries to host a confirmed breeding population of Indochinese tigers, committed to working with the international community to safeguard the species. The First National Tiger Action Plan (NTAP) 2010–2020 was developed to guide this effort, with the goal of "increasing the size of the breeding tiger population at Nam Et–Phou Louey; maintaining ecological connectivity across Tiger Conservation Landscapes (TCLs); and establishing baseline tiger data nationwide by 2020".

Despite these intentions and the investments made by government agencies and conservation partners, no verified tiger records have been obtained in Nam Et–Phou Louey, or anywhere across Lao PDR, since 2013. This absence for more than a decade indicates a severe decline and the likely extirpation of resident tiger populations.

The loss of tigers in Lao PDR has been driven by persistent poaching, extensive prey depletion, and insufficiently effective law enforcement within protected areas during the NTAP implementation period. These findings highlight the need for a renewed, strategic, and well-resourced national effort to restore habitat, rebuild prey populations, and create the enabling conditions necessary for future tiger recovery.

1 WWF. 2016. Tiger Overview. [Accessed: Oct. 12/16]. http://www.worldwildlife.org/species/tiger

1.2 The Need for Revision of National Tiger Action Plan (NTAP)

Recognizing the species' functional extinction at the national level, Lao PDR nonetheless retains exceptional long-term recovery potential due to its extensive forest landscapes, the continued presence of key prey species, and its geographic proximity to source tiger populations in Thailand. These attributes position the country as a landscape capable of supporting future natural recolonization through dispersal from adjacent protected areas in Thailand.

The revised National Tiger Action Plan therefore adopts a strategic shift in focus—moving from efforts aimed at protecting a resident population to establishing the ecological, institutional, and governance foundations required for future tiger recovery. The updated plan now renamed the National Tiger Recovery Action Plan 2026–2035 (NTRAP 2026–2035), emphasizes landscape restoration, systematic prey-base recovery, and significantly strengthened transboundary collaboration, particularly with Thailand's Western Forest Complex, one of the most important remaining strongholds for wild tigers in the region.

The revised NTRAP 2026-2035 is essential to re-establishing Lao PDR's role in regional tiger conservation and to aligning national priorities with emerging international frameworks, including the Global Tiger Recovery Program (2022–2034), the Kunming-Montreal Global Biodiversity Framework, the Convention on Biological Diversity (CBD) and The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The revised NTRAP strengthens the country's contributions to these frameworks through improved enforcement, species recovery, and transboundary collaboration.

The Government of Lao PDR reaffirms its commitment to global tiger conservation through active alignment with the Global Tiger Recovery Program (GTRP) 2022–2034. As a Tiger Range Country, Lao PDR formally endorses the GTRP vision of restoring viable, connected, and ecologically functioning tiger populations across Asia. The Government demonstrates a clear and sustained commitment to restoring tiger populations, combating wildlife crime, securing critical habitats, supporting communities, and contributing to the shared global responsibility of tiger conservation.

Crucially, the updated NTRAP strengthens Lao PDR's capacity to attract technical and financial supports from international partners by presenting a credible, science-based roadmap for tiger and ecosystem recovery. It also enhances alignment with national policy instruments, including the National Forestry Strategy to 2035 and Vision to 2050, the National Biodiversity Strategy and Action Plan (NBSAP) 2026-2030, and the National Green Growth Strategy of the Lao PDR till 2030, the 10th National Socio-Economic Development Plan (NSEDP 2026-2030), ensuring that tiger conservation contributes to broader objectives in biodiversity protection, climate resilience, forest governance, and rural development.

1.3 Alignment of NTRAP 2026-2035 with KM-GBF and NBSAP 2026-2030.

The revised Lao National Tiger Recovery Action Plan (2026–2035) contributes directly to the goals and targets of the Kunming-Montreal Global Biodiversity Framework (KM-GBF 2050) and advances Lao PDR's commitments under the Convention on Biological Diversity (CBD) as details in the National Biodiversity Strategy 2026-2030. The plan supports the following goals of the GBF:

i. **Goal A – Reducing Threats to Biodiversity**: Through habitat restoration, recovery of prey species, and strengthened anti-poaching efforts, the plan contributes to reversing species decline and mitigating pressures on biodiversity.
ii. **Goal B – Sustainable Use of Biodiversity**: It promotes sustainable land and forest use practices aligned with national forest and green growth strategies, ensuring that biodiversity resources are used responsibly and equitably.

iii. **Goal C – Equitable Benefit-Sharing**: The plan includes provisions for community-based conservation and sustainable livelihoods, ensuring that local communities are direct beneficiaries and active participants in biodiversity protection.

iv. **Goal D – Implementation and Mainstreaming**: By investing in institutional capacity, enhancing inter-agency collaboration, and integrating biodiversity into national development strategies, the plan supports the mainstreaming of biodiversity considerations across key sectors.

In doing so, the revised NTRAP strengthens Lao PDR's role in delivering on the CBD's global targets and advancing regional and international efforts to safeguard endangered species, restore ecosystems, and promote inclusive conservation.
The plan supports the following Lao national targets:

v. **National Target 3 –** By 2030, at least 30% of terrestrial and inland water areas, especially areas of particular importance for biodiversity and ecosystem functions and services, will have been identified, effectively conserved, and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, while ensuring that sustainable uses are fully consistent with conservation outcomes, recognizing and respecting the rights of local communities

vi. **National Target 4 –** By 2030, a national red list and process for designating threatened species will have been completed; recovery plans will have been finalized for priority species listed as endangered or critically endangered; and human-wildlife conflicts will have been reduced by 50%. Cumulative #. Percentage

vii. **National target 5 & 9 –** By 2030, the existing laws, regulations, and monitoring of fauna and flora will have been sufficiently implemented to ensure sustainable uses of wild species with effective management planning, especially in commercial trade, through consultation with local communities and ethnic groups.

1.4 Development Process of the NTRAP 2026–2035

The NTRAP 2026–2035 was formulated through a structured, multi-stage national planning process designed to ensure scientific rigor, institutional ownership, and long-term implementability. The process was initiated by the establishment of a National Steering Committee, chaired by the Deputy Minister of Agriculture and Forestry and comprising senior representatives from key ministries and national conservation agencies, to provide strategic oversight, policy direction, and decision-making authority.

A nationwide consultation workshop was subsequently convened with representatives from all National Protected Areas located within designated Tiger Conservation Landscapes, together with provincial authorities, academic institutions, national CSOs, international NGOs (IUCN, WWF, WCS), conservation practitioners, donors, and financial institutions such as the World Bank. This workshop applied analytical tools, including threat and root-cause analysis, institutional capacity assessment, and strategic prioritization, to evaluate the current conservation context, challenges, opportunities, and enabling conditions. Participants collaboratively articulated a shared recovery vision, long-term goal, measurable objectives, and preliminary management interventions.

Following the consultation, a technical team consolidated workshop outputs, reviewed scientific literature and recent monitoring data, conducted policy and legal gap analyses, and integrated international best practices and regional tiger recovery frameworks. The draft version of the plan was formally circulated to national agencies, thematic experts, and relevant stakeholders for technical review, written comments, and proposed revisions.

A national validation workshop was held to confirm technical accuracy, operational feasibility, cross-sectoral alignment, financing considerations, and institutional mandates. Final revisions were incorporated to ensure consistency with national development strategies, legal frameworks, and global biodiversity commitments such as the Global Tiger Recovery Program and the Kunming–Montreal Global Biodiversity Framework.

Through this process, the NTRAP 2026–2035 emerged as a nationally endorsed, evidence-driven strategic roadmap guiding tiger and prey recovery in Lao PDR over the next decade.

1.5 Tiger Conservation Landscapes (TCLs) in Lao PDR.

At least eight Tiger Conservation Landscapes (TCLs) were identified across the country in the first National Tiger Action Plan, and classified into four different classes (Figure 2 and table 2).

TCL class 1: Landscapes have habitat to support at least 100 tigers, evidence of breeding over the last decades, minimal to moderate levels of threat, and conservation measures are in place.

TCL class 2: Landscapes have sufficient habitat for 50 tigers, moderate levels of threat, and a basis for conservation that needs to be improved

TCL class 3: Landscapes have habitat to support some tigers, but with moderate-high levels of threat, and minimal conservation investment.

Potential TCLs: Potential landscapes include both **“survey priority landscapes”** that are large areas of potential habitat under low human impact where tiger status is unknown (or that have not been surveyed since 1995) and **“restoration landscapes”** that are similarly large areas of potential habitat under low human impact but where survey efforts since 1995 have not revealed evidence of tigers

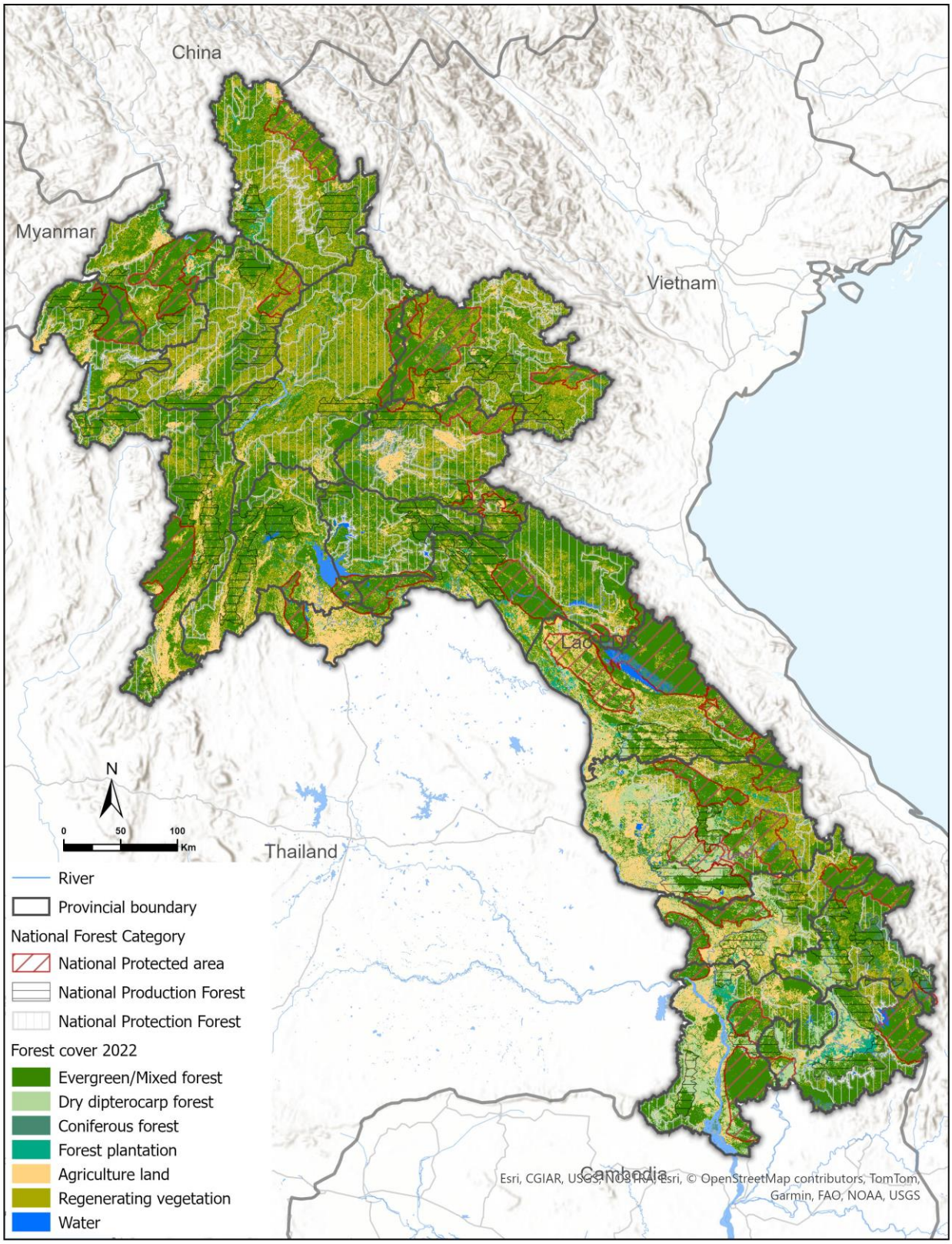


Figure 1. National Forest Categories and forest cover in Lao PDR. (source: DOF, 2022)

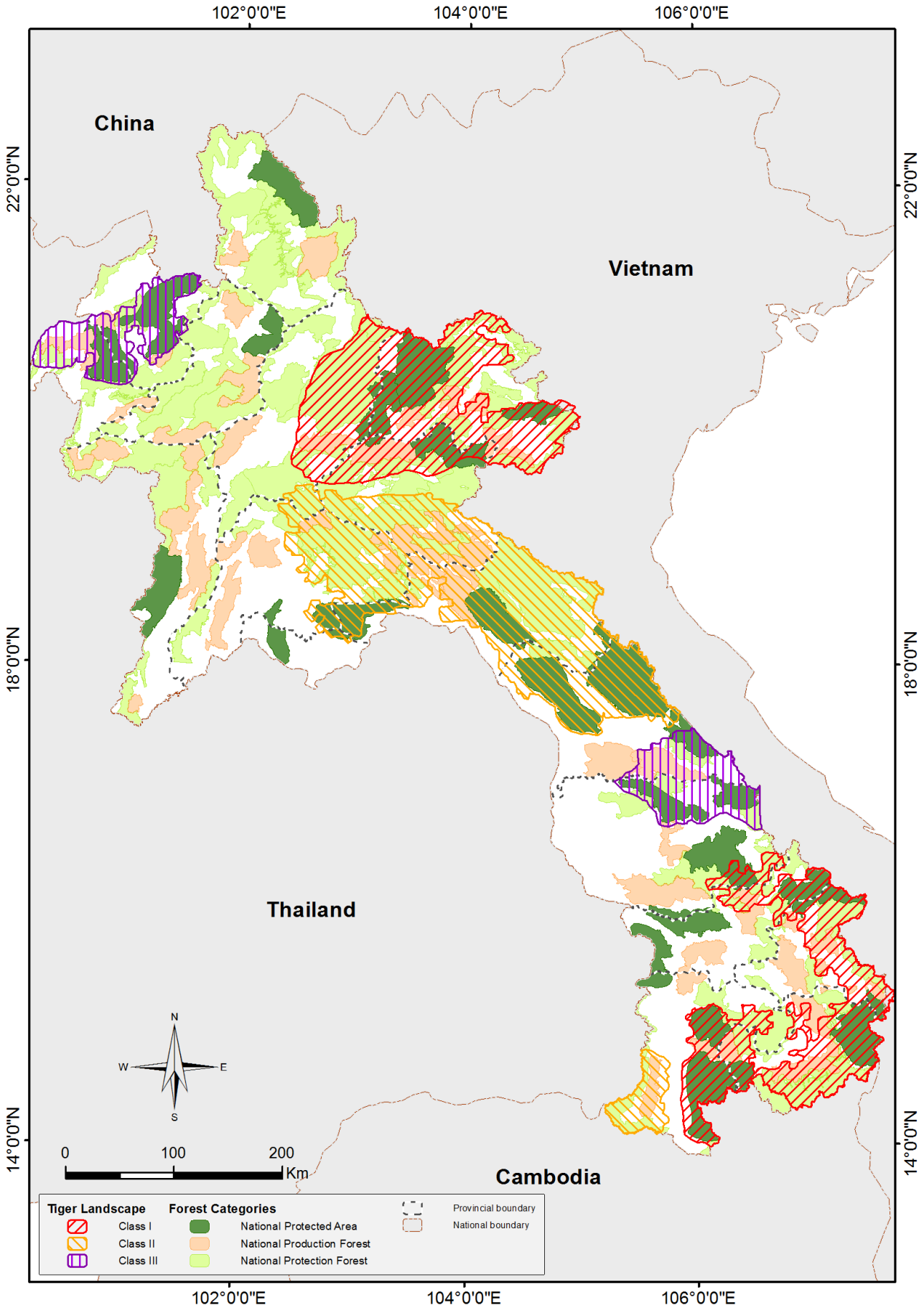


Figure 2. Tiger Conservation Landscape in Lao PDR (NTAP 2010-2020).

Table 1. Tiger Conservation Landscapes (TCLs) across Lao PDR

TCLs (Names of Areas)	Global TCL No.	Area (km^2)
TCL Class 1		
Nam Et-Phou Loeuy TCL (Nam Et-Phou Loeuy, Nam Xam, and Phou Sabot-Poungchong)	#35	25,978
Southern Laos (Xe Sap, Dong Ampham, Xe Piane and Dong Houasao NPAs, biodiversity corridors)	#27	19,996
TCL Class 2		
Central Laos (Nam Kading, Nakai-Nam Theun, and Phou Hinpoun NPAs, Nam Mouane-Nam Gnouang watershed, Phou Chomvoy, Nam Ngiep1 watershed, south Xiengkhouang)	#34	36,317
Dongkhanthoung Provincial Protection Forest (far-south western Laos)	#26	2,526
TCL Class 3		
Areas within and adjoining Hin Nam Nor NPA (Laving-Lavern, Phou Xanghe NPAs, Khoun Xe Nongma PPA)	#33	7,477
Areas within and adjoining the Nam Ha and Nam Kan NPAs	#36	7,315
Potential TCLs		
Areas within and adjoining the Xe Bang Nouan and Phou Xiengthong NPAs	#32	6,948
Areas within and adjoining Nam Poui and Phou Phanang NPAs	#21	14,139
Areas within Phou Den Din NPA	-	4,581

1.6 Review of the First National Tiger Conservation Action Plan (NTAP)

1.6.1 Vision, goals, and objectives

1) Vision

The 1st NTAP set the vision in that "*A Lao PDR with large functioning forest ecosystems where tigers thrive forever, which provides sustainable social, economic and environmental benefits to the people of Lao PDR*"

2) Goals by 2020

The primary goal of the National Tiger Action Plan was "*to increase size of breeding population of tigers at source site, Nam Et-Phou Louey, ensure connectivity between all tiger landscapes, and obtain baseline data on tiger populations for all TCLs in Lao PDR, by 2020*".

3) Seven Strategic Objectives

To achieve above goals and vision, seven objectives were set as following:

(1) Raise Awareness – increase public and stakeholder support.
(2) Protected Zones – establish Totally Protected Zones (TPZs) and corridors.
(3) Strengthen Law Enforcement – improve enforcement of national and international laws.
(4) Cross-Sector Cooperation – enhance collaboration between national agencies.
(5) International Cooperation – reduce transboundary illegal wildlife trade.
(6) Human-Tiger Conflict Mitigation – monitor and reduce conflicts.
(7) Institutional Capacity – strengthen staffing, resources, and sustainable financing.

1.6.2 Achievements

Significant progress was achieved during the implementation of the First National Tiger Action Plan (NTAP) 2010–2020, particularly in strengthening the national legal and policy framework and in advancing site-based conservation programs, details are described below:

1) Legal framework

The implementation of the first National Tiger Action Plan coincided with a period of substantial reform in Lao PDR's legal and policy framework governing wildlife, forests, and biodiversity conservation. Although wild tiger populations continued to decline during this period due to persistent poaching, depletion of prey species, and increasing habitat pressures, the national enabling framework for conservation was significantly strengthened. These legal and policy reforms now constitute the foundational framework for the 2026–2035 National Tiger Recovery Strategy. This section provides an overview of the key legal and policy instruments adopted during this period and outlines their relevance to tiger conservation and recovery.

2) Strengthening of National Legal Frameworks

i. ***Law on Aquatic and Wildlife Animals (No. 07/NA, 2007 – in force throughout 2010–2020)***

The Law on Aquatic and Wildlife Animals remained the primary legal instrument regulating wildlife management during the NTAP implementation period. It defines species protection categories, regulates hunting, transport, farming, and trade of wildlife, and prohibits possession or commercialization of *Category I* species, including tigers. The law provides the statutory basis for wildlife crime enforcement, seizures, and prosecution.

ii. ***Environmental Protection Law (No. 29/NA, 2012)***

The revised Environmental Protection Law strengthened national responsibilities for natural resource conservation and introduced clearer requirements for Environmental Impact Assessment (EIA) and Initial Environmental Examination (IEE). It requires developers to identify, avoid, and mitigate impacts on biodiversity, including wildlife habitats within tiger landscapes.

iii. ***Penal Code (No. 26/NA, 2017; promulgated 2018)***

The Penal Code marked a major improvement in legal deterrence against wildlife crime. It consolidated criminal provisions for wildlife and forest offences and established stronger penalties for illegal hunting, possession, transportation, and trade of protected species. It also reinforced provisions addressing organized wildlife trafficking networks, directly supporting tiger law enforcement objectives.

iv. ***Revised Forestry Law (No. 64/NA, 2019)***

The amended Forestry Law modernized forest governance by clarifying mandates, strengthening forest categories, and reinforcing biodiversity conservation within Conservation Forests and National Protected Areas. Since most tiger habitats fall within conservation forest landscapes, this revision strengthened the legal basis for protecting remaining tiger habitats and potential reintroduction areas.

3) Reform of Protected Area and Forest Governance

i. *Decree on Protection Forest (No. 333/PM, 2010)*

This decree strengthened the management of Protection Forests, enhancing watershed protection, ecosystem integrity, and habitat connectivity—critical components for sustaining viable tiger landscapes.

ii. *Decree on Protected Areas (No. 134/GoL, 2015)*

The 2015 Protected Area Decree represented one of the most significant governance reforms of the decade. It redefined the national system of protected areas, validated PA categories and zoning systems, and clarified management and enforcement roles. This decree strengthened the legal authority of protected area managers and provided an improved framework for managing habitats used by tigers and prey species.

iii. *National Assembly Decision on Forest Categories (No. 273/NA, 2014)*

This decision officially approved the national classification of Conservation, Protection, and Production Forests. It secured large, contiguous forest landscapes—many overlapping with historical tiger range—and reinforced the legal permanence of conservation forest areas.

iv. *Environmental Impact Assessment (EIA) Decree (No. 21/PM, 2019)*

The EIA Decree introduced stronger requirements for project screening, biodiversity impact assessment, and mitigation. For tiger conservation, the decree provides legal leverage to scrutinize and manage development projects within or adjacent to tiger habitats, reducing risks from habitat fragmentation and infrastructure expansion.

4) Measures to Reduce Habitat Loss and Forest Degradation

i. *Concession Moratorium (PM Order No. 13/PM, 2012)*

The national moratorium on mining, rubber, and eucalyptus concessions reduced pressure on forest ecosystems and helped slow habitat conversion in landscapes historically occupied by tigers.

ii. Suspension of Logging in Production Forests (PM Order No. 31/PM, 2013)

This order suspended timber extraction in Production Forest Areas (PFAs), reducing unsustainable logging and limiting access routes used by poachers and illegal traders.

iii. Strengthened Control of Timber Exploitation (PM Order No. 15/PM, 2016)

This order reinforced national measures to combat illegal logging, timber transport, and sawmill operations. As illegal logging often facilitates hunting access, this order indirectly contributed to reducing poaching pressure in tiger habitats.

5) Strengthening Wildlife Trade Control and CITES Compliance

i. CITES Implementation (2015–2020)

During NTAP implementation, the Government of Lao PDR strengthened compliance with CITES. Key measures included the issuance of regulations restricting the trade of Appendix I species, improved oversight of wildlife imports and re-exports, and strengthened coordination at points of entry and exit.

ii. National Ivory Action Plan (NIAP)

As part of CITES compliance, the NIAP committed the country to enhanced ivory trade control, law enforcement, and monitoring of domestic markets. These improved anti-trafficking measures supported broader tiger conservation efforts, given the overlap in criminal networks involved in tiger and ivory trade.

iii. PM Order No. 05/PM on Prohibited Wildlife (2018)

This landmark order provided one of the strongest legal instruments for combating wildlife trafficking. It prohibited commercial breeding of Category I species, strengthened regulation of wildlife farms, authorized strict inspection of illegal trade hubs, and enabled swift enforcement responses against wildlife crime networks. This order directly addressed NTAP objectives related to reducing illegal trade in tigers and their prey.

6) National Strategies Supporting Tiger Conservation

i. National Biodiversity Strategy and Action Plan (NBSAP 2016–2025)

The revised NBSAP emphasized the national priority of conserving globally threatened species, including tigers. It outlined targets for expanding protected areas, restoring degraded ecosystems, enhancing wildlife law enforcement, and strengthening community engagement. These measures directly support the long-term recovery of tiger populations.

ii. National Forestry Strategy to 2020

This strategy framed national commitments to forest protection and sustainable forest management. Maintaining high forest cover aligns with tiger conservation needs, as extensive, undisturbed forests are essential for prey populations and biodiversity resilience.

iii. National Green Growth Strategy to 2030 (2019)

The National Green Growth Strategy recognized biological resources as natural capital central to sustainable development. It reinforced cross-sectoral coordination to reduce environmental pressures, improve natural resource governance, and promote conservation of priority ecosystems.

7) Site-based Conservation Programs

From 2010–2020, Lao PDR implemented significant site-based conservation initiatives that directly supported the objectives of its First National Tiger Conservation Action Plan by

strengthening law enforcement, improving habitat security, restoring prey populations, reducing snaring and forest encroachment, and expanding community-based conservation mechanisms. These programs made measurable contributions to habitat security, threat reduction, and institutional strengthening, which now form the foundation for the 2026–2035 National Tiger Recovery Strategy.

Table 2. Summary of Conservation Projects across the Country during 2010-2020

Northern Tiger Conservation Landscapes (TCLs)

Protected Area	Years	Donors / Funding Sources	Budget (US$M)	Project Name / Activities
Nam Et–Phou Louey NPA (TCL1)	2017–2021	KfW, EU, GEF, USFWS, AFD, EPF/WB	1.8 (3)	Strengthening Capacity & Management of NEPL – Law enforcement; conservation outreach; biological monitoring & research; land-use planning; livelihoods; ecotourism.
Nam Xam NPA (TCL1)	2018–2020	EPF/WB	0.5	Strengthening Collaborative Management**:** Land-use planning; boundary demarcation; patrol strengthening; livelihoods; CCAs.
Phousabot–Poungchong NPA (TCL1)	2018–2020	EPF/WB	0.44	Strengthening Collaborative Management: Land-use planning; boundary demarcation; patrol strengthening; livelihoods; CCAs.
Nam Kan NPA (TL3)	2015–2022	KfW /GoL	17.5	ICBF – Integrated Conservation of Biodiversity & Forest – Law enforcement; land-use planning; livelihood improvement.
Nam Ha NPA (TL3)	2015–2022	KfW /GoL	17.5	ICBF – Integrated Conservation of Biodiversity & Forest – Law enforcement; land-use planning; livelihood improvement.
Nam Poui NPA (Potential TCL)	2010-present	WWF	1	General conservation support – WWF-supported law enforcement, community engagement, wildlife monitoring, elephant conservation

Central Tiger Conservation Landscapes (TCLs)

Protected Area	Years	Donors / Funding Sources	Budget (US$M)	Project Name / Activities
Nakai–Nam Theun NPA (TCL2)	2017-2021	EPF/WB, NTPC	2.99 (1.2/year)	Strengthening NT2 Watershed & Nakai–Nam Theun NPA (WMPA) – Law enforcement, biological monitoring, land-use planning, zoning, community livelihoods, outreach, ecotourism.

Nam Mouan – Nam Gnouang PF (TCL2)	2018-2020	EPF/WB	0.50	Sustainable Management of NM–NG – Law enforcement, boundary demarcation, land-use planning, patrols, CAP livelihoods, CCAs.
Nam Chouane–Nam Xang Offset Area (TCL2)	2019-2046	PAFO / NNP1	2.70	NNP1 Hydropower Offset Project – 27-year biodiversity offset: law enforcement, land-use planning, zoning, demarcation, conservation awareness, biological monitoring.
Phou Khao Khuay NPA (TCL2)	2018-2020	EPF/WB	0.80	Payment for Ecosystem Services (PES) Pilot – Training, research, PES operationalization, anti-poaching patrol incentives.
Phou Chomvoy PPA (TCL2)	2018-2020	EPF/WB	—	Payment for Ecosystem Services (PES) Pilot – Training, research, PES operationalization, anti-poaching patrol incentives.
Nam Kading NPA (TCL2)	2004-2024	WCS	—	The Integrated Ecosystem and Wildlife Management Project in Bolikhamxay Province (IEWMP): NPA management capacity, law enforcement, outreach, livelihoods, research & monitoring, ecotourism, village development fund, CCA
Khoun Xe Nongma PPA (TCL3)	2015-2022	KfW /GoL	(17.50)	ICBF – Integrated Conservation of Biodiversity & Forest – Law enforcement; land-use planning; livelihood improvement.

Southern Tiger Conservation Landscapes (TCL)

Protected Area / Corridor	Years	Donors / Funding Sources	Budget (US$M)	Project Name / Activities
Xe Sap – Dong Ampham – Xe Pian – Dong Hua Sao Biodiversity Corridor (TCL1)	2010–2019	ADB	31.84	Biodiversity Conservation Corridors Project – Connectivity management; forest protection; patrols; land-use planning; community livelihood support.
Dong Hua Sao NPA (TCL1)	2018–2021	Korea	0.70	Sustainable Forest Management & REDD+ (F-REDD) – Reduce deforestation; forest rehabilitation; livelihood development.
Phou Xang He NPA (TCL3)	2016–2022	UNDP/GEF	12.08	Dry Dipterocarp Ecosystem Management – Land-use planning; boundary demarcation; biodiversity monitoring; ecotourism; law enforcement; livelihoods.
Dong Phou Vieng NPA (TCL3)	2016–2022	UNDP/GEF	12.08	Dry Dipterocarp Ecosystem Project – Patrol strengthening; land-use planning; community livelihood programs; biodiversity protection.

Eld's Deer Sanctuary (TCL3)	2016–2022	UNDP/GEF	10.88	Sustainable Forest & Land Management – Habitat protection; law enforcement; land-use planning.
Xe Sap NPA (TCL1)	2012-present	WWF, KfW	6	Carbon & Biodiversity Program (CarBi I & II, WWF/KfW) – NPA management support; community forest patrols and biodiversity conservation agreements (BCAs) in buffer zones; livelihood support linked to reducing poaching and agricultural encroachment.
Xe Pian NPA (TCL1)	2010-present	WWF	2	General conservation support

1.6.3 Factors/drivers of achievement

1) Strengthened legislative and institutional framework

- Introduction and gradual update of forestry, wildlife, and protected area laws improved the legal basis for wildlife protection.
- Formalization of Protected Area categories, zoning, and management responsibilities provided clearer governance frameworks.
- Expansion of national strategies (Forestry Strategy, NBSAP, enforcement regulations) aligned national policies with biodiversity protection needs.

2) Significant site-based conservation investments

A large number of conservation projects supported law enforcement, monitoring, and landscape connectivity across tiger ranges, such as:

- NEPL, Nam Kading, Nakai–Nam Theun, Xe Sap, Nam Poui, Dong Hua Sao, Xe Pian, and many others.
- WWF, WCS, ADB, KfW, GEF, WB, EPF and others provided long-term funding for NPA management.

3) Improved law enforcement and SMART-based patrol systems

- Many NPAs established full-time patrol teams, boundary demarcation, and routine patrol cycles.
- Adoption of SMART patrolling improved monitoring, accountability, and reporting.
- Several sites reduced snaring pressure in patrolled zones.

4) Expansion of community-based conservation mechanisms

- Introduction of Community Conservation Agreements (CCA) in NEPL, Nam Poui, Xe Sap, and other sites strengthened community roles.
- Livelihood support (ecotourism, NTFP management, alternative income) increased community compliance.
- Ecotourism models like Nam Nern Night Safari linked community benefits to wildlife sightings.

5) Landscape connectivity initiatives

- ADB Biodiversity Conservation Corridors (XSP–DAP–XPN–DHS) improved ecological connectivity in the Southern Annamites.
- WWF/KfW **CarBi I & II** strengthened transboundary forest protection on the Laos–Vietnam border.
- Nam Poui – Doi Phou Kha improved ecological connectivity to the Western Forest Complex of Thailand.

6) Strengthened biological monitoring and knowledge base

- Camera trapping, wildlife surveys, and prey monitoring expanded significantly across NPAs.
- Baseline data for prey species, habitat conditions, and threat profiles improved decision-making.

1.6.4 Gaps

1) Insufficient, Inconsistent, or Fragmented Law Enforcement

- Despite improvements, many NPAs continued to suffer from:
  - High snaring pressure
  - Lack of long-term funding for ranger salaries and operations
  - Limited cross-border law enforcement cooperation
- Patrol coverage remained uneven, especially in remote areas.

Threats to tigers and prey remained high.

2) Weak Legal Enforcement and Prosecution

- Arrests rarely resulted in effective prosecution or penalties.
- Wildlife crime law enforcement remained weak outside NPAs (markets, transport routes).
- Limited judicial understanding of wildlife crime cases.

Poaching networks could operate with minimal consequence.

3) Habitat Loss and Agricultural Encroachment Continued

- Despite land-use planning, agricultural expansion and infrastructure development (roads, hydropower, mining) continued inside or near NPAs.
- Forest fragmentation increased in several landscapes.

Tiger habitat quality and prey availability declined.

4) Limited Prey Base Recovery

- Although monitoring improved, prey populations remained low in all priority landscapes due to:
  - Snares and traps
  - Continued subsistence hunting.

Without prey recovery, tiger recovery became impossible.

5) Insufficient Community Incentives in Some Landscapes

- Benefit-sharing and livelihood support were not consistently applied across all tiger landscapes.
- Many CCAs (in most protected areas) were short-term or donor-driven, lacking sustainability.

Communities continued to rely on hunting and forest extraction.

6) Fragmentation of Tiger-Specific Actions

- Most site-based projects focused on general conservation (forest protection, livelihoods, biodiversity), not tiger-specific recovery actions.
- No coordinated national tiger monitoring system was maintained.
- Tiger-focused enforcement, snare removal, and targeted prey-restoration programs were limited.

Tiger persistence was not ensured despite significant NPA investments.

7) Limited Transboundary Coordination

- Weak collaboration with neighboring countries, e.g., Vietnam and Thailand.
  - Cross-border intelligence sharing
  - Wildlife trafficking enforcement

Tigers and prey remained vulnerable along transboundary hotspots.

1.6.5 Lessons from the First National Tiger Action Plan (2010–2020)

Between 2010 and 2020, Lao PDR implemented a large number of legal reforms and site-based conservation programs that strengthened habitat protection, law enforcement, and community engagement across protected areas. Progress included updated legislation, SMART patrolling, boundary demarcation, NPA management strengthening, and community-based approaches such as CCAs, VDF, and livelihood programs. Large-scale initiatives, including the ADB Biodiversity Conservation Corridors and the WWF/KfW CarBi Program that helped secure important tiger landscapes and maintain transboundary forest connectivity.

Despite these achievements, major gaps persisted. Poaching and snaring remained widespread, prey populations declined, and enforcement outside NPAs remained weak. Many communities' incentive systems were short-term, and tiger-specific actions, such as targeted prey recovery, snare removal, and national tiger monitoring, were limited or discontinued. Habitat fragmentation from development continued, and transboundary enforcement cooperation remained insufficient. Consequently, although conservation foundations were strengthened, these efforts were not enough to prevent the national extirpation of tigers.

The lessons from 2010–2020 highlight the need for a more coordinated, well-funded, and tiger-focused approach under the National Tiger Recovery Action Plan (2026–2030). Addressing enforcement weaknesses, restoring prey populations, ensuring long-term community incentives, and enhancing transboundary cooperation will be essential for enabling future tiger reintroduction or natural recolonization in Lao PDR.

1.7 Tiger Status in Lao PDR

Tigers are considered functionally extinct within all Tiger Conservation Landscapes (TCLs) in Lao PDR at present (Rasphon 2019)2. In recent years, most reported presence has been anecdotal, originating from villagers and based solely on unverified field signs. Such reports lack the reliability necessary to confirm the continued presence of the species.

Importantly, no verified tiger records have been obtained from the Nam Et–Phou Louey (NEPL) National Protected Area since 2013. Extensive, systematic, and long-term camera-trap surveys conducted within NEPL's core zone have yielded zero confirmed detections over more

2 Rasphone, A., Kéry, M., Kamler, J. F., & Macdonald, D. W. (2019). Documenting the demise of tiger and leopard, and the status of other carnivores and prey in Lao PDR's most prized protected area: Nam Et-Phou Louey. Global Ecology and Conservation

than a decade. Similarly, comparable camera-trap surveys undertaken inside or adjacent to other national protected areas across the TCL network have likewise failed to detect tigers, confirming the conclusion that resident tiger populations have been lost nationally.

The absence of confirmed records is consistent with the exceptionally high threat pressure that has persisted nationwide. Persistent demand for tiger parts, combined with historically inadequate law enforcement capacity, enabled targeted poaching for many years. This pressure has been further compounded by severe declines in wild prey populations throughout the country, creating ecological conditions that make tiger persistence or recovery extremely unlikely.

All available information indicate a sharp and sustained decline in tiger abundance over the past decade. Tigers are now considered extirpated from nearly all forest landscapes in Lao PDR, and any surviving individuals, if still present, are at imminent risk of disappearing. Based on the totality of available evidence, tigers are currently regarded as functionally extinct in Lao PDR.

These conclusions are supported by the following evidence:

i. Absence of photographic records despite systematic survey effort

Camera-trap surveys across multiple landscapes have produced no confirmed detections since 2013:

- In NEPL NPA, more than 32,000 camera-trap days between 2013 and 2017 yielded only two individuals, both photographed in 2013 (Rasphone & Chanthavong 2018).
- Subsequent surveys also produced zero detections, despite extensive spatial coverage and high sampling effort in:
  - Nakai–Nam Theun NPA
  - Nam Ngiep 1 Watershed (Xaysomboun)
  - Nam Sang–Nam Chang Offset Area (Bolikhamxay)
  - Khoun Xe Nongma Protection Forest (Khammouane)
  - Xe Sap–Dong Ampham–Xe Piane biodiversity corridors.

The complete absence of photographic evidence across multiple, large-scale surveys is consistent with a severely depleted or non-existent wild population.

ii. Decline in poaching-related evidence

Prior to 2010, tiger carcasses and body parts were occasionally confiscated from protected areas, indicating the presence of a small but targeted wild population. Since 2013, only a single case involving three dead tigers, believed to have originated from a captive facility rather than the wild, has been recorded in Khammouane Province. No verified poaching incidents involving wild tigers have been documented in the past decade, a pattern strongly consistent with population collapse rather than improved protection.

1.8 Priority TCLs for Tiger Recovery 2026-2035

Priority 1: Areas within and adjoining Nam Poui NPA (Potential TCL)

Nam Poui National Protected Area (NPA) and its adjoining forests are recognized as a Priority 1 site for future tiger recovery due to its strategic position within a broader Lao–Thai transboundary forest system and its potential to receive naturally dispersing tigers from Thailand’s source landscapes. Although Nam Poui is not directly contiguous with the Western Forest Complex (WEFCOM), home to the most viable Indochinese tiger population in Southeast Asia, it is ecologically connected to the northern Thai protected-area network,

including Doi Phu Kha National Park and adjoining conservation forests in Nan Province. These forests form a functional upland corridor system that can operate as a stepping-stone pathway for long-distance tiger dispersal.

Scientific evidence demonstrates that tigers possess substantial long-distance movement capability, enabling them to expand into suitable habitats when ecological conditions permit. In Thailand, radio-collared tigers in Huai Kha Khaeng and Thung Yai Naresuan Wildlife Sanctuaries (WEFCOM) have been recorded dispersing 80–120 km across complex mixed evergreen-deciduous forest landscapes (Simcharoen et al., 2014; Duangchatrasiri et al., 2016)3. Comparable studies elsewhere in Asia have documented dispersal distances of 160–200 km in Amur tigers (Goodrich et al., 2010) and up to 250 km in northern India's Rajaji–Corbett landscape (Harihar et al., 2013). These findings confirm that tigers are fully capable of moving across large, heterogeneous landscapes, including fragmented or mixed-use areas, provided that key ecological linkages remain intact.

Nam Poui's upland ridges, remnant forest patches, elevational corridors, and low human-density core zones collectively enhance landscape permeability and its potential role as a receiver landscape for dispersing tigers. The presence of recoverable prey species, such as sambar (*Rusa unicolor*)**,** muntjac (*Muntiacus spp*.)**,** and wild pig (*Sus scrofa*), further strengthens its suitability. These ecological characteristics align closely with regional tiger recovery frameworks, including the Global Tiger Recovery Program (GTRP) and WWF's Tiger Alive Initiative, which identify the Nan–Xaignabouly forest complex as an important Tiger Conservation Landscape (TCL) with long-term recolonization potential.

Given these factors and supported by a long-established law-enforcement system in Nam Poui, strengthened through WWF-Laos' patrol and SMART monitoring programs, the landscape presents the most feasible opportunity in Lao PDR for natural tiger recolonization. Protecting and enhancing this ecological connectivity is therefore a core strategic priority under the National Tiger Recovery Action Plan (NTRAP) 2026–2035.

3 Simcharoen, S., et al. (2014). Tiger occupancy and population recovery in Thailand's Western Forest Complex. Oryx.

Duangchatrasiri, S., et al. (2016). Dynamics of a tiger population in Thailand: Implications for population recovery. Biological Conservation

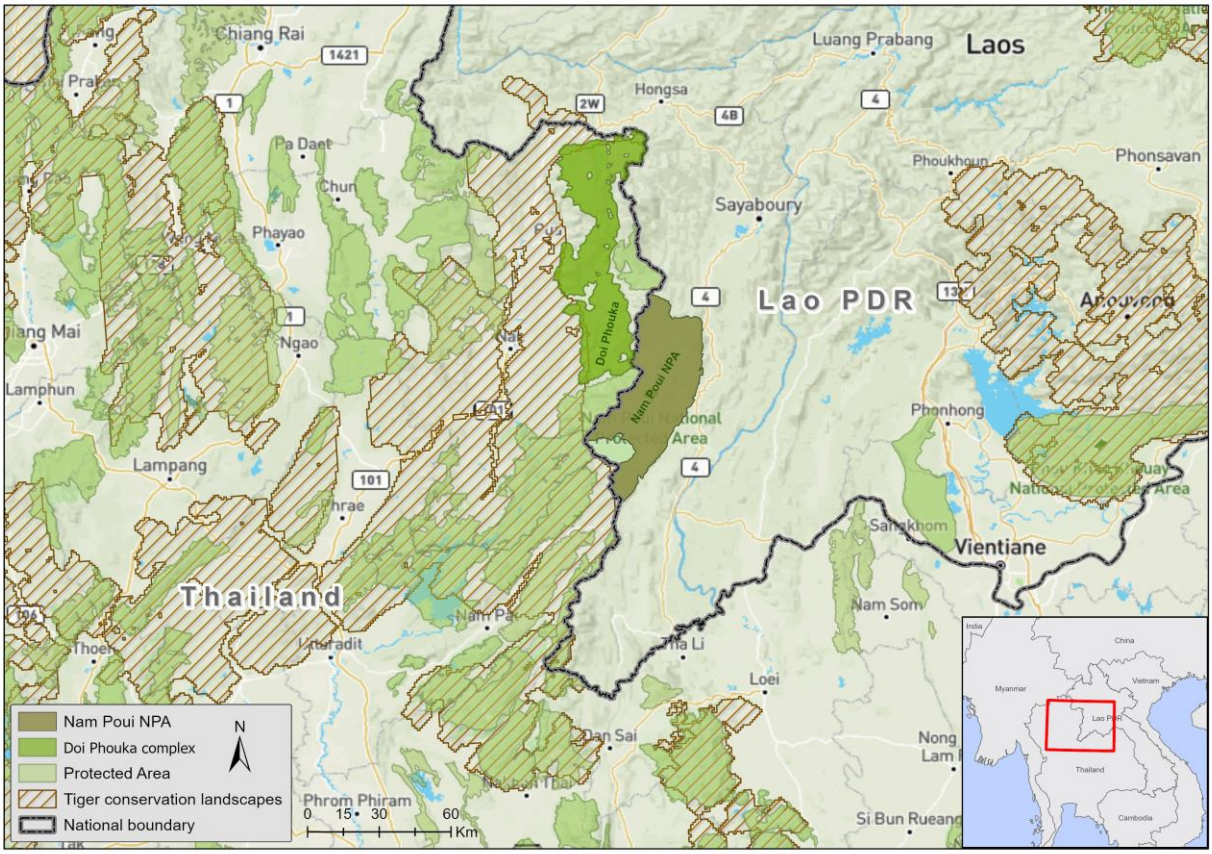


Figure 3: Nam Poui NPA and connectivity with Doi Phou Kha, Thailand

Priority 2: TCL class 1 and TCL class 2.

TCL class 1:

- North-eastern Laos, Nam-Et Phou Loeuy TCL, globally classified as TCL#35, with an area of approximate 25,978 km^2 including areas within and adjoining the Nam Et-Phou Louey, Nam Xam and Phousabot-Poungchong NPAs.
- Southern Laos, globally recognized as TCL # 27 with an area of approximately 19,996 km^2, including the areas within and adjoining Dong Hua Sao, Xe Piene, Dong Ampham, Xe Sap and Dong Phou Vieng NPAs and the Xe Khampho, Bolavan Southwest and Phou Khathong PPAs. This area adjoins contiguous habitat in central Vietnam and northeastern Cambodia.

These TCL class 1 hold promise for tiger conservation in the Lao PDR, but they are not currently suitable for immediate recovery efforts like Nam Poui NPA because these landscapes are not directly connected to existing source populations of tigers in Thailand or elsewhere.

Both Nam Et-Phou Louey (NEPL) and southern TCLs (e.g., Xe Sap, Dong Ampham, Xe Piane) have extensive forest cover and suitable terrain for tigers. They still contain wild ungulates such as sambar, muntjac, and wild pigs, but prey populations are significantly depleted due to decades of unsustainable hunting. Therefore, restoring prey density is a prerequisite before any tiger recovery can be successful.

As a result, these TCLs are essential components of Laos's long-term tiger recovery strategy but require substantial ecological restoration and enforcement investment before they can

support tigers again. NEPL had one of the last known breeding tiger populations in Indochina, but tigers are now functionally extinct in this landscape due to poaching and snaring. The last tiger was photographed by camera trap in 2014.

TCL class 2:

Central Laos

Nam Kading, Nakai-Nam Theun, and Phou Hinpoun NPAs, Nam Mouane-Nam Gnouang watershed, Phou Chomvoy, Nam Ngiep1 watershed, south Xiengkhouang.

Similar to TCL class 1, these TCLs are essential components of Laos's long-term tiger recovery strategy but require substantial ecological restoration and enforcement investment before they can support tigers again. They have extensive forest cover and suitable terrain for tigers. They still contain wild ungulates such as sambar, muntjac, and wild pigs, but prey populations are significantly depleted due to decades of unsustainable hunting. Therefore, restoring prey density is a prerequisite before any tiger recovery can be successful.

1.9 Challenges to Tiger Recovery in Lao PDR.

Tiger recovery in Lao PDR faces major biological, institutional, enforcement, and socio-economic obstacles. Key challenges are summarized in table 4 (Table 4).

Table 3. Challenges to tiger conservation and recovery in Laos

No.	Challenges	Description
1.	Extremely Low or Functionally Extinct Tiger Population	• No confirmed breeding tigers since the early 2010s. • Remaining individuals (if any) are widely dispersed and genetically isolated. • Natural recovery is now highly unlikely without transboundary recolonization or reintroduction.
2.	Severe Prey Depletion Across Tiger Landscapes *(Without sufficient prey biomass, tiger recovery is biologically impossible).*	• Drastic declines in sambar, muntjac, wild pig, gaur, serow, and other prey species due to: o Intensive snaring o Subsistence hunting o Wildlife trade
3.	Widespread Snaring Crisis	• Snares remain the most pervasive threat across all NPAs. • Tens of thousands of snares persist in the landscape – even inside well-patrolled areas. • Snaring kills tigers, prey species, and other large mammals (e.g., bears, cats).
4.	Poaching and Illegal Wildlife Trade (IWT)	• Cross-border poaching networks operate with relative ease. • Laos remains a transit and supply country for regional wildlife trade. • Enforcement at markets, roads, and border points often remains weak.

		• High-value products (tiger bones, big cat skins) create economic incentives.

5.	Weak Law Enforcement and Prosecution	• Patrol efforts have increased, but:
		  ○ Arrests rarely lead to strong prosecution.
		  ○ Penalties for wildlife crime remain inconsistently applied.
		  ○ Limited coordination between DOFI, police, customs, and courts.
		• Deterrence remains low, enabling ongoing illegal activity.

6.	Habitat Loss and Landscape Fragmentation	• Although forest cover remains relatively high, quality habitat is declining due to:
		  ○ Agricultural expansion (maize, cassava, rubber)
		  ○ Hydropower, mining, and road development
		  ○ Infrastructure expansion deep into NPAs
		• Creates isolated forest patches unsuitable for sustaining tiger populations.

7.	Limited Community Incentives for Conservation	• Many communities remain dependent on:
		  ○ Bushmeat for protein
		  ○ Forest-based livelihoods
		  ○ Shifting cultivation
		• Conservation incentives (CCAs, village fund, livelihood programs) are not yet:
		  ○ Scaled up
		  ○ Long-term
		  ○ Consistently funded
		• Short-term projects cannot replace daily livelihood pressures.

8.	Insufficient Long-Term Financing	• Many NPAs rely on short project cycles (2–5 years). • Ranger salaries and operational costs lack guaranteed long-term budgets. • Lack of sustainable financing (trust funds, PES, offsets) limits continuous protection.
9.	Limited Transboundary Coordination	• Weak cross-border patrols and intelligence-sharing with: ○ Thailand (Western Forest Complex connection to Nam Poui) • Potential tiger recolonization from Thailand requires stronger binational frameworks.
10.	Low Institutional Capacity	• High turnover of NPA staff.

		• Limited training in investigation, case preparation, or IWT intelligence. • Limited monitoring, research, and technical expertise at provincial levels.
11.	Lack of Tiger-Specific Management Actions (Post-2013)	• After tigers disappeared from NEPL, targeted tiger actions were deprioritized. • No national-level tiger monitoring, snare-removal campaigns, or prey-restoration programs were maintained. • Recovery planning was stalled for nearly haft a decade.
12.	Social and Governance Challenges	• Local governance varies significantly across provinces. • Customary hunting practices remain strong in remote villages.

2nd National Tiger Recovery Action Plan

(NTRAP 2026-2035)

II. 2nd National Tiger Recovery Action Plan (NTRAP 2026-2035)

2.1 Vision

A Lao PDR with a large functioning, connected forest ecosystem where tigers and prey species are restored, enhanced, and protected, providing sustainable social, economic, and environmental benefit to the people of Laos.

2.2 Goals

To re-establish conditions for the natural recolonization and long-term survival of wild tigers in Lao PDR by 2035 through habitat restoration, prey base recovery, strengthened protection, and transboundary cooperation with countries hosting source populations.

2.3 Objectives

1) Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) for dispersing tigers
2) Recover and sustain healthy prey populations to support tiger occupancy/return.
3) Strengthen protection and law enforcement capacity in priority landscapes to ensure tiger safety upon arrival.
4) Enhance transboundary collaboration for tiger conservation, particularly with Thailand, to facilitate natural tiger movement.
5) Build local support and readiness for natural tiger return.
6) Establish a robust monitoring, research, and adaptive management system.
7) Establish Sustainable Financing Mechanism
8) Strengthen institutional capacity.

2.4 Conceptual framework: Causes of Tiger Extirpation in Lao PDR

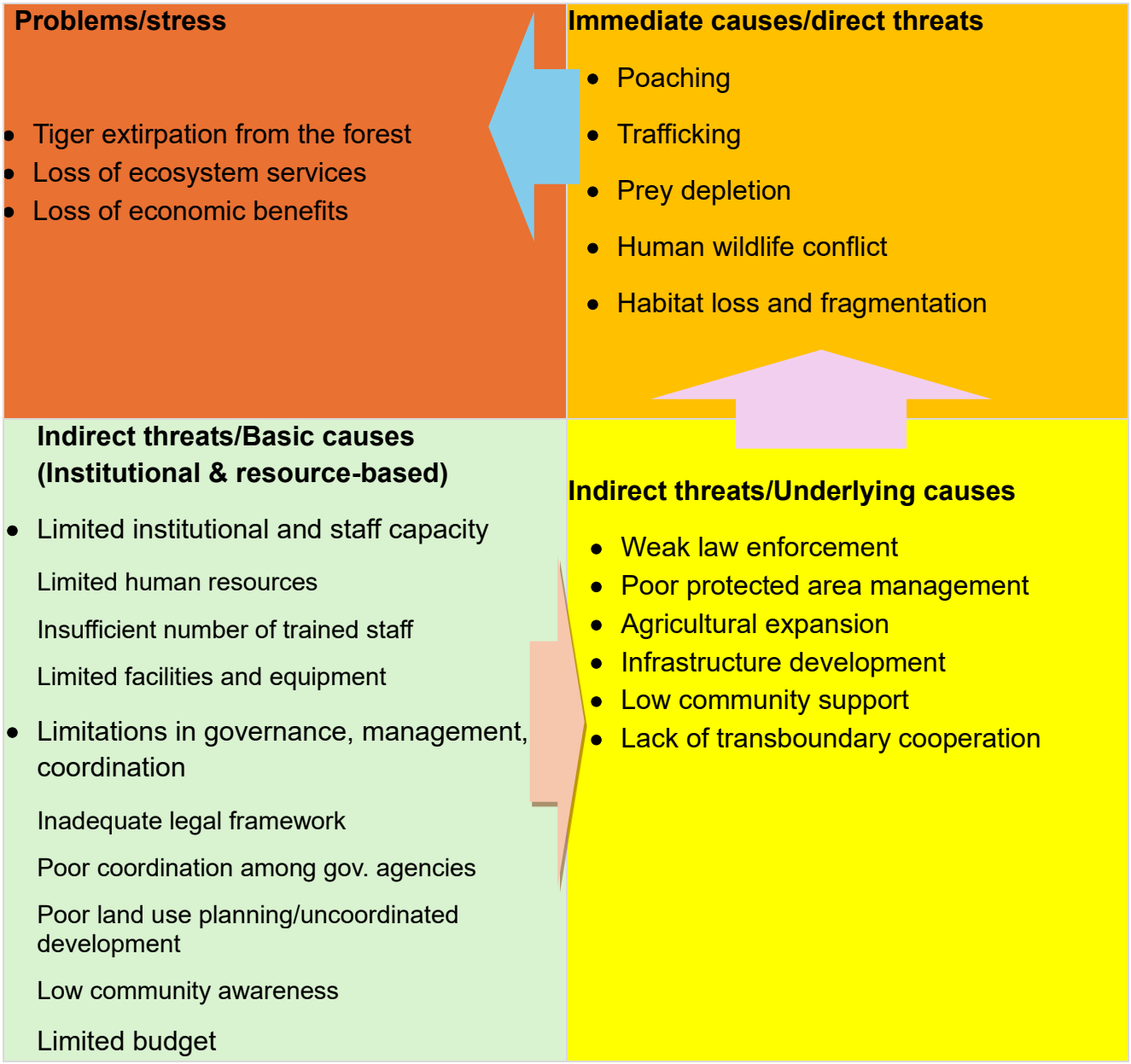
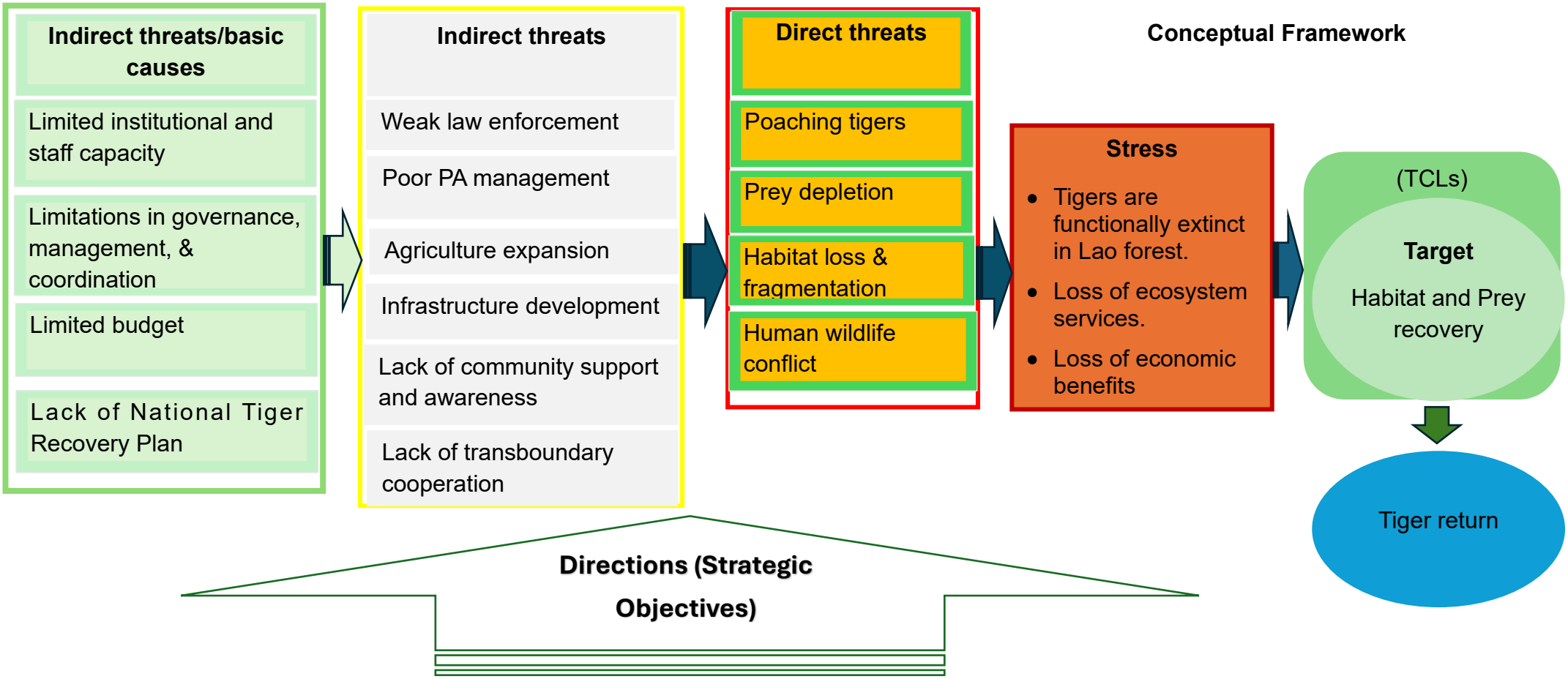


Table 4. Threats to Tigers – Categorized by Direct and Indirect Impacts

Category	Threat	Description
Direct threats (Immediate cause)	1. Poaching of Tigers	Targeted killing for illegal trade in body parts (medicine, trophies, etc.)
	2. Prey Depletion	Overhunting of prey species reduces food availability
	3. Human-Wildlife Conflict	Retaliatory killing due to livestock depredation
Indirect threats	5. Habitat Loss & Fragmentation	Caused by deforestation, agriculture, development

(Underlying causes)	6. Weak Law Enforcement	Limited patrols, poor capacity, corruption, lack of penalties
	7. Poor Protected Area Management	Inadequate staffing, training, planning, and budgeting
	8. Infrastructure Development	Roads and projects fragment habitat and increase access for poachers
	9. Lack of Transboundary Cooperation	Inconsistent efforts across borders limit conservation of wide-ranging tigers
	10. Low Community Support & Awareness	Lack of local engagement or benefit-sharing reduces willingness to conserve
Indirect threats (Basic causes)	Limited institutional and staff capacity	Limited human resource, number of well-trained staff, facilities & equipment
	Limitations in governance, management, & coordination	Inadequate legal framework, poor coordination, poor land use planning, low awareness,
	Limited budget	Lack of sustainable finance



SO 6: Establish a robust monitoring, research, and adaptive management system.
SO 7: Establish Sustainable Financing Mechanism
SO 8: Strengthen institutional capacity

SO 3: Strengthen protection and law enforcement capacity in priority landscapes to ensure tiger safety upon arrival.
SO 4: Enhance transboundary collaboration for tiger conservation, particularly with Thailand, to facilitate natural tiger movement.
SO 5: Build local support and readiness for natural tiger return.

SO 1: Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) for dispersing tigers
SO 2: Recover and sustain healthy prey populations to support tiger occupancy/return

2.5 Legal framework

The National Tiger Recovery Action Plan (2026–2035) is firmly grounded in, and fully aligned with, the existing national legal and policy framework governing wildlife conservation, protected areas, biodiversity management, and sustainable development in Lao PDR.

The main current laws, decrees, and strategies that affect tiger conservation include:

1) 10th National Socio-Economic Development Plan (NSEDP) (2026–2030)
2) Green Growth Strategy 2030
3) National Biodiversity Strategy and Action Plan (2026–2030)
4) National Land Use Master Plan to the year 2030
5) Environmental Decree No. 389 of 2022
6) Forestry Law (2021)
7) Law on Wild Animals, No. 42/SNP (2024)
8) Five-year Agriculture and Forestry Development Plan (2021–2025)
9) Roadmap on implementing the Decree on Protected Areas and sustainable Financing (2024)
10) Prime Minister's Decree 01 (2024) on Protection Forests
11) Prime Minister's Decree No. 2 (2024) on Production Forest.
12) Prime Minister's Order No. 05/PM on Strengthening Strictness of the Management
13) and Inspection of Prohibited Wild Fauna and Flora
14) Prime Minister's Decree Nº 219 on Protected Areas (2023)
15) PM's Decree No. 299/2022 on CITES
16) Amended Land Law (2019)
17) Environmental Protection Law, No. 29 NA (updated 2013)

The principal legislative instruments relevant to tiger conservation and management are synthesized and presented in Table 5 (see Table 5).

Table 5. Key National Legal Framework Supporting Tiger Conservation in Lao PDR.

Forest Strategy 2035 and Vision 2050 (GoL 2024)	The specific goals of the Forest Strategy 2035 are to increase national forest cover to 70%. The strategy set a goal of designating: 8.2 million ha of protection forests 4.8 million ha of conservation forest 3.1 million ha of production forest
National Biodiversity Strategy & Action Plan (NBSAP) 2026-2030)	Sets national targets for threatened species recovery, protected area strengthening, and illegal wildlife trade reduction. Target 1: Spatial planning Target 2: Ecosystem restoration Target 3: Protected areas Target 4: Threatened species & human-wildlife conflict

	Target 5 & 9: Wildlife management
Law on Wild Animals, No. 42/SNP (2024)	The Law formally designates tigers and their principal prey species as Category 1 (Protected) wildlife, thereby imposing a legal prohibition on their hunting, capture, possession, transport, and trade. It classifies wildlife into three categories: Category 1 – Prohibited, Category 2 – Managed, and Category 3 – General, each subject to differentiated management, utilization, and enforcement provisions.
Forestry Law	The Forestry Law establishes comprehensive principles, regulations, and measures for the management, protection, development, use, and monitoring of forests and forestlands. It guides forest governance through the zoning of protected areas into Totally Protected Zones (TPZ), Controlled Use Zones (CUZ), and Buffer Zones (BZ).
Prime Minister's Decree on Protected Areas (2023)	The decree promotes landscape management and enhanced coordination among government sectors, local communities, and the private sector. It defines the national PA system, zoning, management roles, and enforcement authority. It mandates standardized zoning (TPZ, CUZ and BZ) and assigns legal authority for patrolling, regulation enforcement, and prosecution of natural resource crimes in PAs.
Environmental Protection Law (2023)	The Law requires Environmental Impact Assessments (EIA/ESIA) for development activities that may affect protected areas, wildlife, or ecological integrity. The Law prohibits actions that cause environmental degradation, empowers regulatory authorities to prevent, mitigate, and remediate impacts on endangered species and habitats, and establishes monitoring, compliance, and enforcement mechanisms to ensure long-term environmental protection.
Penal Code (No. 26/NA, 2017; promulgated 2018)	It criminalizes the hunting, possession, transport, and trade of protected wildlife, including tigers and their derivatives, and provides legal provisions for prosecution, penalties, and deterrence against wildlife crime
PM's Decree No. 299/2022 on CITES Implementation	The Decree operationalizes CITES obligations within Lao PDR, strengthens regulation of wildlife trade, and enhances national enforcement and compliance mechanisms to combat illegal trafficking and protect threatened species—including tigers and their prey
Law on Land No. 70/NA (2019)	Guides land allocation, planning, and tenure, including restrictions on land conversion in tiger conservation landscapes.
Decrees on NPAs and Village Forest Regulations	Provide operational authority for community engagement, co-management, patrolling, and habitat protection.

Constitution of the Lao PDR 2015 (Amended 2025)	Establishes State responsibility for natural resource protection and biodiversity conservation

2.6 Strategic Framework for National Tiger Recovery Action Plan

Strategic Objective 1: Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) for dispersing tigers.

TCLs are scientifically identified areas with the ecological potential to support viable tiger populations. They often contain remnant habitats, prey species, and landscape connectivity, making them the most strategic zones for conservation investment.

The restoration and protection of safe, functional habitats in priority tiger conservation landscapes (TCLs), particularly those bordering Thailand's forest complex, including Doi Phou Kha National Park and directly adjacent parks connected to the Western Forest Complex, offer a significant opportunity to re-establish tiger populations through natural dispersal. Securing these areas can enhance ecological resilience, increase prey availability, and create the conditions necessary for successful tiger breeding and territorial establishment.

Dispersing tigers, particularly sub-adult males and females, require expansive, undisturbed, and connected habitats to establish territories, find mates, and maintain genetic diversity across the landscape. Without such environments, dispersal becomes perilous or impossible, leading to population isolation, inbreeding, and local extinctions.

To achieve this objective, strategic actions will include:

SA1	Designate and manage Tiger Recovery Zones (TRZs) in Nam Poui NPA and other priority TCLs.
SA2	Conduct detailed habitat suitability and connectivity assessments, including forest cover mapping, to prioritize areas for restoration.
SA3	Minimize human disturbance in TRZs by restricting livestock grazing, illegal logging, and road expansion
SA4	Establish strict protection and core zones with limited access in TRZs, particularly in core abundant prey populations.
SA5	Prevent land-use conversion (e.g., agriculture, infrastructure) in core tiger and prey habitats.
SA6	Integrate tiger recovery goals into district and provincial land-use plans.
SA7	Collaborate with infrastructure developers to avoid and mitigate impacts on tiger habitats
SA8	Maintain low levels of anthropogenic mortality risks (poisoning, retaliatory killings) through awareness and rapid response protocols.

Strategic Objective 2: Recover and Sustain Healthy Prey Populations to Support Tiger Occupancy and Return.

Restoring and maintaining a healthy prey base is a foundational step for successful tiger recovery. Without it, tiger populations cannot re-establish, grow, or persist. Investing in prey recovery not only benefits tiger conservation but also contributes to overall ecosystem health, food security, and sustainable livelihoods for local communities.

Tigers are apex predators that depend on a stable and abundant prey base for survival. Without adequate prey, even the most well-protected and connected habitats cannot support viable tiger populations. In Lao PDR, widespread hunting pressure, habitat degradation, and illegal wildlife trade have severely depleted populations of key prey species such as gaur, sambar deer, muntjac, wild pigs, and other ungulates. This decline in prey density is one of the primary ecological constraints limiting tiger occupancy, breeding, and natural recolonization.

Healthy prey populations are essential for several reasons:

- Enable tiger survival and breeding – tigers require large quantities of prey to survive and reproduce. A single adult tiger consumes an estimated 50–60 large prey animals annually.
- Promote territory establishment and dispersal - an abundant prey base supports territorial stability and encourages dispersal of sub-adult tigers into new areas.
- Reduce human-tiger conflict – with sufficient natural prey, tigers are less likely to hunt livestock or approach human settlements.
- Support ecosystem function – prey species play vital roles in maintaining healthy ecosystems. Their recovery also benefits other carnivores and biodiversity in the landscape.

To achieve this objective, strategic actions will include:

SA9	Identify and prioritize key prey recovery areas within TRZs based on habitat suitability and proximity to corridors.
SA10	Conduct baseline surveys of key prey species (e.g., gaur, sambar, muntjac, wild pig) and monitor trends over time (i.e., population dynamics and density).
SA11	Enforce strict anti-poaching measures targeting snaring and illegal hunting of prey species through intensified patrolling and prosecution of wildlife crimes.
SA12	Establishing community-based no-hunting zones and conservation agreements.
SA13	Explore soft-release programs or assisted recovery for certain prey species where populations are critically low.
SA14	Encourage natural prey dispersal by enhancing habitat quality across multiple sites.
SA15	Promote sustainable NTFP harvesting as an alternative to bushmeat hunting.

Strategic Objective 3: Strengthen Protection and Law Enforcement Capacity in Priority Landscapes to Ensure Tiger Safety Upon Arrival.

Strengthening protection and law enforcement in TCLs is not just a safeguard but a prerequisite for any successful tiger recovery program. Ensuring that priority landscapes are well-defended against poaching, encroachment, and illegal activities will create the secure conditions necessary for tigers to survive, thrive, and contribute to the long-term restoration of the species in Lao PDR.

The success of tiger recovery depends not only on habitat quality and prey availability but also, critically, on the safety and security of tigers once they return or disperse into target areas. Without strong, consistent protection and effective law enforcement in place, tigers remain vulnerable to key threats such as poaching, snaring, retaliatory killing, and habitat encroachment.

Historically, weak enforcement in many protected areas in Lao PDR has allowed widespread illegal hunting of both tigers and their prey, undermining conservation efforts. Even a small number of poaching incidents can derail recovery in low-density populations. Ensuring that dispersing tigers survive long enough to establish territories, breed, and contribute to population growth requires a secure environment, backed by capable and well-resourced enforcement systems.

Therefore, without enforcement, efforts to restore habitat and recover prey are undermined. Protection systems serve as the backbone of all tiger conservation actions for the following reasons:

- *Prevent tiger poaching and trafficking*

Tigers are highly targeted in the illegal wildlife trade for their body parts. Without strong deterrence and surveillance, the risk of poaching remains high, especially in areas where tigers are newly arriving or reintroduced and may be more vulnerable.

- *Remove snares and other indiscriminate threats*

Snaring is widespread across many forest landscapes in Lao PDR and poses a major threat to both tigers and their prey. Many snares are not specifically set for tigers but still result in accidental deaths or injury, making snare removal and prevention a top priority.

- *Provide a safe environment for natural dispersal*

Sub-adult tigers seeking new territory must be able to move through landscapes without encountering human-induced threats. Effective law enforcement ensures that corridors and buffer zones are safe for tiger movement and settlement.

To achieve this objective, strategic actions will include:

SA16	Increase patrolling coverage and effectiveness in Nam Poui NPA and other priority TCLs using SMART and other digital tools.
SA17	Deploy well-trained, equipped, and motivated law enforcement teams, including transboundary coordination units.
SA18	Target wildlife trafficking networks linked to prey and tiger parts through intelligence-based enforcement
SA19	Establish village-based wildlife guardians and support local enforcement collaborations.

SA20	Create rapid response teams to monitor and act on threats in real time.
SA21	Establish specialized anti-poaching units for priority areas with high threat levels.
SA22	Promote inter-agency coordination among DAFO, DOF, police, border patrols, and judiciary systems.
SA23	Secure sustainable financing for law enforcement (e.g., through conservation trust funds or REDD+ mechanisms).
SA24	Strengthen ranger training on wildlife laws, evidence handling, intelligence gathering, and threat response.

Strategic Objective 4: Enhance Transboundary Collaboration for Tiger Conservation, particularly with Thailand, to Facilitate Natural Tiger Movement.

Enhancing transboundary collaboration, particularly with Thailand, is a strategic necessity for enabling natural tiger dispersal, strengthening ecological connectivity, and achieving long-term tiger conservation in Lao PDR. It represents one of the most practical and promising approaches for re-establishing a self-sustaining tiger population within the country.

In Southeast Asia, wild tiger populations are now confined to a limited number of remaining strongholds, and their long-term recovery depends on maintaining ecological connectivity among these populations. For Lao PDR, one of the most promising opportunities for tiger recovery lies in strengthened collaboration with Thailand, particularly across the transboundary landscapes linked to Doi Phou Kha National Park, which adjoins Thailand's Western Forest Complex (WEFCOM). This complex currently supports one of the largest and most secure tiger populations in mainland Southeast Asia.

Enhancing transboundary collaboration is essential for the following reasons:

- *Facilitate natural dispersal and recolonization*

Tigers, particularly sub-adults, naturally disperse over long distances in search of territories and mates. The shared forest ecosystems between Nam Poui National Protected Area (Lao PDR) and Doi Phou Kha National Park (Thailand) form a critical ecological corridor that could enable tigers from the Western Forest Complex (WEFCOM) to move into suitable habitats in Lao PDR. Ensuring that this transboundary pathway remains open, connected, and secure is essential for restoring tiger presence in Lao landscapes.

- *Foster regional learning and capacity building*

Transboundary collaboration facilitates knowledge exchange, technical training, and shared use of tools and best practices. Lao staff and institutions can benefit from Thailand's extensive experience in tiger monitoring, protected area management, and community-based conservation.

- *Increase the chances of long-term recovery success*

Without functional corridors to source populations, re-establishing tigers in Lao PDR through natural means becomes nearly impossible. Transboundary collaboration with

Thailand offers a realistic, cost-effective, and ecologically sound pathway for tiger recovery, compared to expensive and risky reintroduction efforts from distant populations.

To achieve this objective, strategic actions will include:

SA25	Develop and implement a bilateral MoU between Lao PDR and Thailand for tiger conservation and monitoring.
SA26	Organize regular bilateral meetings and technical exchanges between Lao and Thai PA managers and researchers.
SA27	Coordinate joint corridor monitoring and camera trapping along national borders.
SA28	Facilitate data sharing and coordination between Lao and Thai wildlife authorities and research teams.
SA29	Harmonize enforcement protocols and conduct joint operations against cross-border wildlife crimes.
SA30	Engage with regional platforms like the Global Tiger Forum and ASEAN-WEN to support collaboration.

Strategic Objective 5: Build Local Support and Readiness for Natural Tiger Return.

The success of tiger recovery in Lao PDR depends not only on ecological and enforcement interventions but also, critically, on the attitudes, participation, and preparedness of local communities living in and around priority tiger landscapes. Building local support and readiness is essential to ensure that tiger conservation efforts are socially acceptable, culturally appropriate, and economically beneficial for the people most directly affected.

Historically, negative human-wildlife interactions, such as livestock depredation or fear of tigers, have led to retaliatory killings and resistance to carnivore conservation. In areas where tigers are expected to return, through natural dispersal or population expansion, it is vital that communities understand the ecological and economic importance of tiger recovery and are actively engaged in efforts to support and coexist with this apex predator. When communities are informed, engaged, and supportive, they are more likely to respect conservation rules, avoid hunting prey species, and report illegal activities such as poaching or snaring. Eventually, they can play a central role in protecting habitats, removing snares, monitoring wildlife, and participating in community-based patrols.

In summary, building local support and readiness is not a secondary activity but a foundational pillar of tiger conservation. Without the engagement and cooperation of communities, tiger recovery efforts will face resistance and ultimately fail.

To achieve this objective, strategic actions will include:

SA31	Establish local conservation committees to co-manage wildlife and habitat restoration activities.
SA32	Conduct awareness campaigns in target villages near TRZs and corridors on tiger ecology, safety, and conservation benefits.

SA33	Establish Tiger-Friendly Villages with conservation agreements that prohibit hunting, reduce forest clearance, and allow community participation in monitoring.
SA34	Support sustainable, wildlife-compatible livelihoods (e.g., agroforestry, NTFPs, ecotourism, conservation incentive schemes).
SA35	Promote awareness and pride in tiger conservation through cultural programs, education, and media
SA36	Offer incentives and conservation-linked benefits (e.g., PES, community development funds).
SA37	Engage and train community members in camera trapping and reporting signs of tigers or their prey.
SA38	Prepare Human-Wildlife Conflict mitigation plans including compensation schemes, livestock enclosures, and rapid response teams.

Strategic Objective 6: Establish a Robust Monitoring, Research, and Adaptive Management System.

Effective tiger conservation requires not only well-designed interventions but also reliable information, continuous learning, and the ability to adapt strategies based on changing conditions and new evidence. Establishing a robust monitoring, research, and adaptive management system is critical to ensuring that conservation efforts are evidence-based, targeted, and responsive.

By establishing a robust monitoring system, it enables the ability to track progress, assess impact, detect emerging threats, and make informed decisions as detailed below:

i. *Track progress toward recovery goals:* Monitoring tiger presence, prey populations, threats, and habitat conditions allow us to measure progress and assess whether recovery targets are being met over time.
ii. *Detect and respond to emerging threats:* Timely data on threats such as poaching, or habitat degradation allows for quicker, more effective action to protect tigers and their habitats.
iii. *Improve decision-making through science:* Collecting data on tigers, their prey, habitats, and interactions with people helps guide better management and conservation decisions.
iv. *Enhance transparency and accountability:* Systematic data collection and regular reporting help demonstrate results to government agencies, donors, communities, and other stakeholders – building trust and sustaining support.
v. *Support Adaptive Management:* Conservation is complex and conditions on the ground are constantly changing. An adaptive management approach, using data to evaluate effectiveness and adjust actions accordingly, ensures that resources are used efficiently and impact is maximized.
vi. *Foster collaboration and knowledge sharing:* Standardized monitoring systems (e.g., SMART, camera trapping, GIS tools) and open data platforms support collaboration between government, NGOs, researchers, and communities, facilitating coordinated action across landscapes and borders.

To achieve this objective, strategic actions will include:

SA39	Model habitat suitability and corridor effectiveness to guide investment in restoration and protection.
SA40	Monitor tiger dispersal and occupancy through camera trapping, genetic sampling, and community-based sightings.
SA41	Establish a central database for tracking tiger and prey data, threats, and enforcement actions.
SA42	Partner with research institutions to study tiger ecology, movement, and prey dynamics.
SA43	Develop and implement a long-term ecological monitoring framework to assess progress and adapt strategies.
SA44	Publish regular status reports to inform decision-makers, donors, and stakeholders.

Strategic Objective 7: Establish Sustainable Financing Mechanism.

Establishing a sustainable financing mechanism is essential to ensure long-term support for tiger conservation efforts. Protecting and managing tiger habitats, enforcing laws, monitoring wildlife, and engaging local communities require consistent funding over many years. Without reliable financial resources, conservation programs risk interruption or failure.

By developing diverse and dependable funding sources—such as government budgets, conservation trust funds, public-private partnerships, tourism revenues, and international donor support—we can ensure the continuity, stability, and scalability of conservation actions. A well-structured financing mechanism also builds confidence among stakeholders and donors, encouraging long-term investment in tiger recovery.

To achieve this objective, strategic actions will include:

SA45	Develop a financial plan and cost estimate for tiger conservation (funding needs for PA man., current funding sources, gap analysis, ad potential funding sources, e.g., trust funds, biodiversity offsets, PES).
SA46	Identify and map stakeholders (NGOs, donors, developers or privates) within TCLs.
SA47	Facilitate multi-stakeholder consultations to ensure buy-in and to clarify expectations, especially from the private sector, to support conservation in nearby tiger landscapes or core habitats.
SA48	Develop Public-Private Partnerships (PPPs) - establish agreements or MoUs with developers or Concession holders, e.g., hydropower companies, alignment with EIA/ESIA, PES (watershed protection) and Biodiversity Offsets.
SA49	Establish Fund Governance and Financial Management System in priority TCLs contributed from private sources (and international climate and biodiversity funds)

Strategic Objective 8: Strengthening institutional capacity.

As described above, weak institutional capacity undermines effective tiger conservation by limiting law enforcement and coordination among stakeholders. Institutions lack skilled staff, adequate resources, and clear mandates, resulting in poor implementation of conservation actions.

Strengthening institutional capacity is therefore critical to ensuring long-term success in tiger recovery and protected area management. Robust institution equipped with skilled personnel, clear mandates, and adequate resources can efficiently coordinate multi-sectoral actions, enforce conservation laws, manage protected areas, engage communities, and apply science-based decision-making. Building institutional capacity enhances governance, accountability, and operational efficiency, thereby creating a strong foundation for sustaining tiger populations and their habitats over time across the TCLs.

To achieve this objective, strategic actions will include:

SA50	Develop clear organizational structures, roles, and responsibilities for tiger recovery and enforcement at all levels (central, provincial, local), and ensure adequate staff with appropriate capacity
SA51	Establish inter-agency tiger conservation task forces or committees at national and local levels - National/local Tiger Recovery Committee and Technical Working Groups.
SA52	Facilitate regular coordination meetings and joint planning between government agencies and NGOs.
SA53	Training and Capacity Building: Conduct regular training programs on wildlife law enforcement, ecological monitoring, conflict resolution, and community engagement, wildlife crime investigation and prosecution.
SA54	Support mentoring and exchange programs with successful tiger range countries.
SA55	Ensure operational logistics and equipment (e.g., GPS, cameras, patrol gear, offices, vehicles)
SA56	Strengthen collaboration with NGOs, academic institutions, communities, and international partners.
SA57	Mainstream tiger conservation into development planning and environmental impact assessments.
SA58	Integrate tiger conservation into national biodiversity strategies (NBSAPs) and spatial development plans

2.7 Implementation of the National Tiger Recover Action Plan

2.7.1 Institutional Arrangements

The successful implementation of the National Tiger Recovery Action Plan (NTRAP 2026–2035) in Lao PDR requires a coordinated, multi-stakeholder approach with clearly defined institutional roles at the national, provincial, and local levels. Strengthening institutional arrangements will be critical to ensuring effective leadership, collaboration, and accountability across all actors involved in tiger conservation.

- **Lead Agency: Department of Forestry (DoF)**

The Department of Forestry (DoF) under the Ministry of Agriculture and Environment (MAE) will serve as the lead agency responsible for the overall coordination and implementation of the **National Tiger Recovery Action Plan 2026-2035**. The DoF will guide strategic planning, inter-agency collaboration, and policy integration, ensuring that tiger conservation efforts are embedded within national forest and biodiversity management frameworks. The DoF will also represent Lao PDR in regional and international tiger conservation platforms such as the Global Tiger Forum and ASEAN-WEN.

- **National Tiger Coordination Committee (NTCC)**

A **National Tiger Coordination Committee (NTCC)** will be established by ministerial decision, chaired by Minister of MAE. The NTCC will include senior representatives from:

  - Ministry of Agriculture and Environment (MAE)
  - Ministry of National Defense
  - Ministry of Public Security
  - Ministry of Finance
  - Ministry of Information, Culture and Tourism
  - Ministry of Foreign Affairs
  - Prime Minister’s Office
  - National University of Laos
  - Provincial Governors of key tiger landscape provinces (e.g., Xayabouly)

The NTCC will provide high-level oversight, facilitate cross-sectoral collaboration, review implementation progress, and address policy or operational challenges. It will also oversee coordination with development partners and donor agencies.

- **Technical Working Group (TWG)**

A **Technical Working Group (TWG)** will be established under the NTCC, led by the Director General/Deputy of the Department of Forestry, comprised of technical staff from relevant Departments (e.g., DoF’s Protected Area Management Division, Wildlife and CITES Management Division), research institutions, and international conservation partners (e.g., WWF, WCS, IUCN), and local CSOs (e.g., WCA and others based on technical expertise). The TWG will support scientific assessments, policy development, training, and monitoring and evaluation.

- **Provincial and District-Level Implementation**

At the sub-national level, Provincial Agriculture and Environment Offices (PAEOs) and District Agriculture and Environment Offices (DAEOs) in key tiger landscapes, particularly in Sayabouly, will be responsible for implementing site-level actions, including patrolling, habitat restoration, community engagement, and awareness activities. The Nam Poui National Protected Area Management Unit (NPA MU), under the oversight of Sayabouly PAEO, will be a key operational partner.

Local authorities (district governors, village committees) will be engaged in participatory planning, law enforcement coordination, and monitoring of wildlife and forest use. Community rangers and village conservation teams will be supported through training and incentive mechanisms.

- **Partnerships with NGOs and International Organizations**

Strong partnerships will be established with national and international conservation NGOs, such as WWF, WCS, Panthera, and IUCN, to support implementation. These organizations will provide technical assistance, capacity building, financial support, and field-level implementation through MoUs with the DoF and provincial authorities. Collaboration will also be sought with regional mechanisms such as ASEAN-WEN, the Global Tiger Forum, and the Greater Mekong Subregion (GMS) environmental programs.

- **Law Enforcement Collaboration**

To address illegal wildlife trade and poaching, close coordination will be maintained with the Ministry of Public Security, customs and border authorities, and the Ministry of National Defense. Joint patrols, intelligence sharing, and cross-border cooperation with Thailand and Vietnam will be critical, especially in transboundary landscapes such as Nam Poui–Doi Phou Kha NP (adjoining to the western forest complex).

- **Monitoring and Evaluation Unit**

A **Tiger Recovery Monitoring Unit** will be established within the DoF's Wildlife and CITES Management Division to coordinate data collection, camera trap surveys, GIS mapping, SMART patrol analysis, and periodic assessments of tiger populations and threats. The unit will work closely with provincial teams, research institutions, and international experts to ensure that management decisions are evidence-based and adaptive.

To ensure effective implementation of the National Tiger Recovery Action Plan, it is essential to strengthen institutional arrangements. The Department of Forestry will serve as the lead agency, responsible for coordinating and overseeing all aspects of implementation. This will involve fostering strong partnerships with relevant government ministries and agencies, non-governmental organizations, and international partners. Collaborative efforts will be critical to mobilizing technical expertise, financial resources, and operational support necessary to achieve the plan's conservation objectives and secure a viable future for tigers in Lao PDR.

2.7.2 Monitoring and Evaluation

Monitoring will track progress over time towards achieving the goals and objectives laid out in this Plan. Monitoring is a crucial component of good conservation management. It allows us to assess whether or not threats are decreasing, and if tiger and prey populations and their habitat are increasing or remaining stable. Through monitoring we can test our assumptions as to whether our interventions actually lead to what we want to

achieve or are if they wasted effort. Monitoring tracks changes over time and this distinguishes it from a survey, which estimates conditions at a single point in time. Instead, monitoring uses survey results at many instances in time.

In conservation practice, monitoring is often designed to measure;

i. Conservation targets (impact monitoring) – wildlife and habitats, we need to monitor their changing status over time, e.g., are target species populations increasing as a result of the reduction of snares or guns? or is forest cover increasing, remaining stable as a result of land use zoning.

ii. Changes in the levels of threats (outcome monitoring). How much the threat will be reduced over a certain time-period (e.g., to reduce by 90 percent incidents of illegal hunting inside the Xe Sap over the next 5 years); and

iii. Implementation of interventions (performance monitoring). This involves monitoring to assess whether a planned intervention is implemented over a certain time period.

By measuring all three components along a causal chain – interventions, threats and conservation target, we are able to conclusively determine that a positive change in the status of a conservation target resulted from a reduction in a particular threat due to a specific intervention. For example, by monitoring Sambar deer population densities (conservation target), rate of hunting incidence (threat) and the implementation of ground patrols (intervention), we are able to associate an increase in deer population densities with a reduction in local hunting intensities (e.g., numbers of hunting snares or guns) as a result of presence of ground patrol.

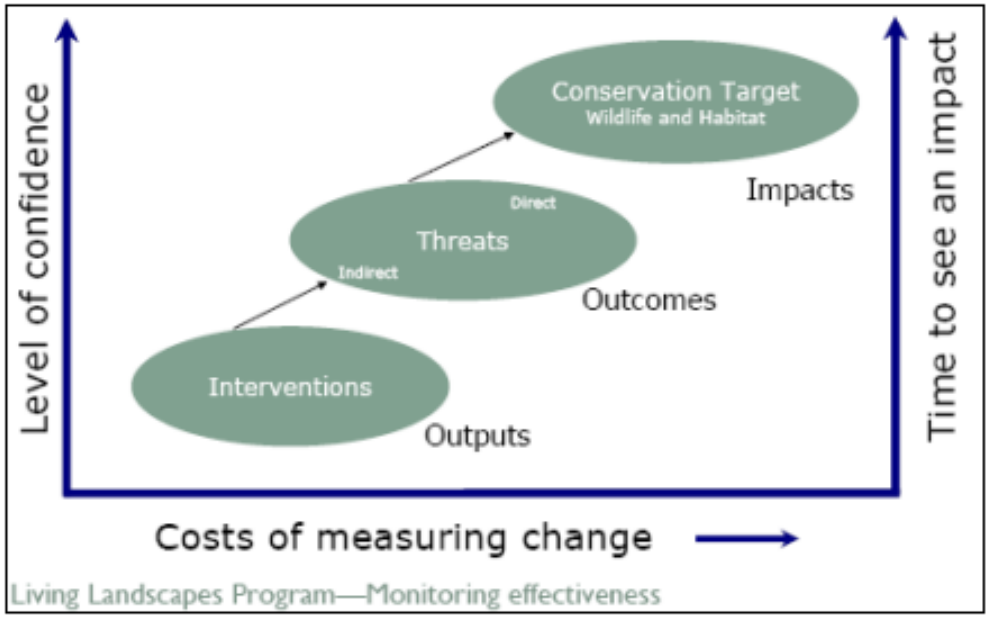


Figure 4. The relationship between confidence, cost and time to results for the different conceptual model components that could be monitored over time. (Source: Wilkie et al., 2006).

2.7.3 Adaptive Management

Monitoring under this Plan is directly linked to the application of adaptive management. Monitoring results will be systematically reviewed to assess whether conservation interventions are achieving their intended outcomes and to inform timely adjustments to management strategies. Adaptive management enables evidence-based decision-making by linking systematic monitoring with regular review and adjustment of interventions, thereby ensuring that conservation actions remain effective and responsive to changing conditions. This approach supports the efficient use of limited resources, reduces implementation risk, aligns with government planning and reporting cycles, and strengthens accountability and learning, thereby increasing the likelihood of achieving long-term recovery objectives for tigers, their prey, and critical habitats.

2.7.4 Accountability

All stakeholders engaged in tiger recovery in Lao PDR shall be held accountable to peers and supervisors for actions undertaken under this Plan. Reporting shall adhere to the established organizational hierarchy and standard operating procedures.

At priority sites, Protected Area Management Units (PAMUs) shall coordinate with relevant government agencies and local communities to implement management, law enforcement, outreach, and ecological monitoring activities. Progress shall be systematically documented and reported to higher-level authorities to ensure transparency, effectiveness, and adaptive management.

At the landscape level, District Agriculture and Environment Offices (DAEOs) and Provincial Agriculture and Environmental Offices (PAEOs) shall coordinate with relevant agencies to effectively implement conservation activities, including wildlife trafficking prevention, awareness-raising, and integration into local development agendas, maintaining mutual accountability through formal collaboration, outcome monitoring, and measurable progress toward Plan objectives.

At the national level, central government agencies, including MAE, DOF, and the Wildlife and CITES Management Unit, shall coordinate across all administrative levels and with international partners, ensure integration of the NTRAP with national development strategies, allocate resources strategically, align budgets and performance indicators with Plan objectives, strengthen transboundary cooperation, and facilitate systematic information sharing with the international community.

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Annex 1. Strategic Framework for Interventions and Indicators by Strategic Objectives

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
Strategic Objective 1: Create safe, functional habitats in priority Tiger Conservation Landscapes (TCLs) for dispersing tigers														
Actions:														
1.1 Designate and manage Tiger Recovery Zones (TRZs) in Nam Poui NPA and other priority TCLs.	NPA MU[4]	25,000 (per site)	x	x	x								A map shows TRZs in NP NPA and other NPAs of priority TCLs (e.g., TCLs1) is designated.	Participatory process
1.2 Conduct detailed suitability and connectivity assessments, including forest cover mapping, to prioritize areas for restoration.	NPA MU (Nam Poui and others)	10,000 (per site)		x	x	x	x						A map displays priority areas for habitat restoration	GIS analysis/ field validation
1.3 Minimize human disturbance in TRZs by restricting livestock grazing, illegal logging, and road expansion.	NPA MU	30,000 (per site)	x	x	x	x	x	x	x	x	x	x	TRZs' management regulation is developed and enforced	Participatory process
1.4 Establish strict protection and core zones with limited access in TRZs, particularly in core abundant prey populations	NPA MU	15,000 (per site)		x	x	x	x	x	x	x			NPA' Core habitat zones mapped and well recognized by local government and communities	Participatory process

4 NPA MU – National Protected Area Management Unit

Strategic objectives/Activities	Lead agency /partners ผู้รับผิดชอบ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
1.5 Prevent land-use conversion (e.g., agriculture, infrastructure) in core tiger and prey habitats	NPA MU and PAFO	15,000 (per site)		x	x	x	x	x	x	x	x	x	NPA zones, in which TRZs is defined, integrated into village PLUPs' regulation.	Participatory process
1.6 Integrate tiger recovery goals into district and provincial land-use plans.	NPA MU and local partners	1,500						x	x				NPA zones and TRZs and village PLUP integrated into district/provincial development agenda.	Participatory process
1.7 Collaborate with infrastructure developers to avoid and mitigate impacts on tiger habitats	NPA MU and local partners	2,000			x	x	x	x	x	x	x	x	Partnership agreement with relevant government partners on mitigation of impacts from development activities in TRZs.	Participatory process
1.8 Maintain low levels of anthropogenic mortality risks (poisoning, retaliatory killings) through awareness and rapid response protocols.	NPA MU and local partners	5,000		x	x		x		x		x	x	• Awareness raising in target communities in NPA and a rapid response protocol for human-wildlife conflicts developed. • Proportion of priority villages reached through awareness campaigns • Number of reported poisoning or retaliatory killing incidents per year	Participatory process
Strategic Objective 2: Recover and sustain healthy prey populations to support tiger occupancy/return.														
Actions:														
2.1 Identify and prioritize key prey recovery areas within TRZs based on habitat suitability and proximity to corridors.	NPA MU and local partners	5,000 (per site)	x	x	x	x							• Habitat suitability assessment for key prey species completed across all TRZs by end of 2026 using GIS and field data • Mapping potential prey recovery areas within TRZs across the NPA	Participatory process/GIS

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
													identified based on habitat quality and presence of prey species by mid-2027.	
2.2 Conduct baseline surveys of key prey species (e.g., gaur, sambar, muntjac, wild pig) and monitor trends over time (i.e., population dynamics and density).	NPA MU and local partners	50,000 (per site)			x	x	x	x	x	x	x		• Report on camera trap surveys in Nam Poui and other key NPAs annually. • Prey monitoring results analyzed and reported annually starting in 2027, with population trends informing adaptive management decisions.	Participatory process
2.3 Enforce strict anti-poaching measures targeting snaring and illegal hunting of prey species through intensified patrolling and prosecution of wildlife crimes.	NPA MU and local partners	65,000 (per site)		x	x	x	x	x	x	x	x	x	Report on routine patrols in TRZs – priority prey recovery areas. • At least 80% of identified core prey habitat zones are covered by foot or mixed-mode patrols annually, based on SMART patrol data, starting in 2027. • Incidents of active illegal hunting signs reduced by 50% in core prey habitat zones by 2028.	Participatory process
2.4 Establishing community-based no-hunting zones and conservation agreements.	NPA MU and local partners	100,000 (per site)			x	x	x	x	x	x	x	x	• At least 5 community-based no-hunting zones are formally established and mapped with community endorsement by 2028. • Community Conservation Agreement (CCA) is established and signed with at least 15 villages in Nam Poui and each target NPA outlining no-hunting commitments, benefits, and enforcement mechanisms by 2028.	Participatory process

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
													• Community patrol or co-enforcement teams established and active in all target villages with conservation agreements by 2028. • At least 80% of households in participating villages are aware of the no-hunting zones and the terms of the conservation agreements by end of 2028.	
2.5 Encourage natural prey dispersal by enhancing habitat quality across multiple sites.	NPA MU and local partners	45,000 (per site)		x	x	x	x	x	x	x	x		• At least one corridor between Nam Poui NPA and other NPAs is functionally restored or maintained (anthropogenic barriers mitigated in corridors). • Prey presence detected (camera traps) in corridors between NPAs within 3 years.	Participatory process
2.6 Promote sustainable NTFP harvesting as an alternative to bushmeat hunting.	NPA MU and local partners	60,000 (per site)				x		x		x		x	• A community-based Sustainable NTFP Management Plan is developed, approved, and implemented in at least 10 target villages in Nam Poui NPA by 2028. • Participatory resource assessment and mapping of key NTFPs conducted in target communities by mid-2028. • At least 80% of NTFP collectors in the target villages are aware of and comply with the sustainable management plan by end of 2030.	Participatory process
2.7 Explore soft-release programs or assisted recovery for	NPA MU and local partners	50,000 (per site)				x	x	x	x	x	x	x	Feasibility assessment completed for soft-release or assisted recovery of at	Participatory process

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
certain prey species where populations are critically low.													least one priority prey species (e.g., sambar, wild pig, or muntjac) by 2025."	
Strategic Objective 3: Strengthen protection and law enforcement capacity in priority landscapes to ensure tiger safety upon arrival.														
Actions:														
3.1. Increase patrolling coverage and effectiveness in Nam Poui NPA and other priority TCLs using SMART and other digital tools.	NPA MU and local partners	70,000 (per site)			x	x	x	x	x	x	x	x	• At least 85% of identified priority zones in Nam Poui NPA and other priority TCLs patrolled at least once per month by 2027. • SMART data collection and reporting fully adopted in Nam Poui NPA and at least 2 additional TCLs by end of 2027. • 100% of patrol teams equipped with GPS devices or SMART mobile tools (e.g., SMART Mobile) for digital data collection by 2026.	Participatory process
3.2. Deploy well-trained, equipped, and motivated law enforcement teams, including transboundary coordination units.	NPA MU and local partners	30,000 (per site)		x	x		x		x		x		• 100% of patrol staff receive standardized training in law enforcement techniques, evidence handling, SMART data use, and safety procedures by 2027. • All patrol teams equipped with essential field gear (e.g., GPS units, radios, first-aid kits, uniforms, boots, rain gear) and communication tools by mid-2027. • At least 90% of approved law enforcement positions in Nam Poui	Participatory process

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
													NPA and other priority areas are filled with active field staff by 2027.	
3.3. Target wildlife trafficking networks linked to prey and tiger parts through intelligence-based enforcement	NPA MU and local partners	25,000 (per site)			x	x	x	x	x	x	x	x	• Intelligence database or information-sharing mechanism (e.g., with customs, police, or INTERPOL focal points) established and functional by end of 2026. • Minimum of 5 individuals involved in wildlife trafficking arrested and processed through legal channels by end of 2027. • At least 80% of wildlife trafficking cases based on intelligence result in formal charges or prosecution by 2027. • Quarterly intelligence-sharing meetings or virtual briefings held between Lao enforcement units and regional partners (e.g., ASEAN-WEN, CITES focal points) starting in 2027.	Participatory process
3.4. Establish village-based wildlife guardians and support local enforcement collaborations.	NPA MU and local partners	25,000 (per site)			x	x	x	x	x	x	x	x	• ≥ 80% of target villages with officially appointed wildlife guardians by 2028. • ≥ 5 of village wildlife guardian per village trained and operational.	Appointment letters and training certificate
3.5. Create rapid response teams (specialized anti-poaching units) to monitor and act on threats in real time for priority areas with high threat levels.	NPA MU and local partners	25,000 (per site)			x	x	x	x	x	x	x	x	• At least 1 team of fully equipped and trained rapid response team established per district or priority zone. • Number of arrests, confiscations, or deterrence actions taken as a result of rapid response	Appointment letters and training certificate

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
3.6. Promote inter-agency coordination among DAFO, DOF, police, border patrols, and judiciary systems.	NPA MU and local partners	15,000 (per site)			x	x	x	x	x	x	x	x	• ≥ 4 formal inter-agency coordination meetings per year (quarterly basis).	Participatory process
3.7. Secure sustainable financing for law enforcement (e.g., through conservation trust funds or financial mechanisms from development projects or partners).	NPA MU and local partners	60,000 (per site)						x	x	x	x	x	• At least 1 formal financing mechanism established and operational within 5 years. • ≥ 2 stakeholder consultations held per year involving local government, communities, and donors.	Participatory process
3.8. Strengthening ranger training on wildlife laws, evidence handling, intelligence gathering, and threat response	NPA MU and local partners	15,000 (per site)			x			x			x		• ≥ 90% of all active rangers receive annual training on wildlife laws, evidence handling, intelligence, and threat response	Training certificates
Strategic Objective 4: Enhance transboundary collaboration for tiger conservation, particularly with Thailand, to facilitate natural tiger movement. **Actions**														
Actions:														
4.1 Develop and implement a bilateral MoU between Lao PDR and Thailand for tiger conservation and monitoring	NPA MU and local partners (DOF and Thai Park)	100,000				x	x	x	x	x	x	x	• Final MoU drafted and signed by both governments within 12–18 months • Establishment of a transboundary working group or coordination committee	MOU' bilateral cooperation.
4.2 Organize regular bilateral meetings and technical	DOF, NPAs, and Thai authority	25,000				x	x	x	x	x	x		≥ 2 bilateral coordination meetings per year organized.	Meeting minutes

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
exchanges between Lao and Thai PA managers and researchers														
4.3 Coordinate joint corridor monitoring and camera trapping along national borders.	Nam Poui NPA and neighboring PAs.	45,000				x	x	x	x	x	x	x	A joint action plan for tiger conservation and monitoring finalized and adopted within 6 months after MoU signing.	A joint action plan
4.4. Engage with regional platforms like the Global Tiger Forum and ASEAN-WEN to support collaboration.	DOF-PAMD	15,000			x	x	x	x	x	x	x	x	• ≥ 2 GTF, ASEAN-WEN, or other regional platform events attended annually • Lao PDR represented in ≥ 1 regional working group or task force.	Membership confirmation
Strategic Objective 5: Build local support and readiness for natural tiger return.														
Actions:														
5.1. Establish local conservation committees to co-manage wildlife and habitat restoration activities.	Nam Poui NPA MU and local partners	45,000				x	x	x	x	x	x	x	• ≥ 80% of target villages have functioning committees within 18 months • ≥ 80 of committee members trained in co-management, wildlife protection, and restoration. • ≥ 1 meeting per quarter per committee of committee meetings held to plan or review conservation activities. • ≥ 1 village-level conservation regulation or agreement endorsed per committee	Participatory process. Member list.

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
5.2. Conduct awareness campaigns in target villages near TRZs and corridors on tiger ecology, safety, and conservation benefits.	Nam Poui NPA MU and local partners	45,000		x	x	x	x	x	x	x	x	x	• ≥ 90% of villages located near TRZs and corridors reached annually through awareness raising. • ≥ 2 awareness events conducted per village per year (e.g., school talks, village meetings, posters).	Participatory process. No. of events & education materials
5.3. Establish **Tiger-Friendly Villages** with conservation agreements that prohibit hunting, reduce forest clearance, and allow community participation in monitoring.	Nam Poui NPA MU and local partners	15,000 (per village)				x	x	x	x	x	x	x	• ≥ 50% of target villages within or near TRZs and corridors designated within 2 years. • ≥ 1 conservation agreement per village, co-developed and signed by local leaders and conservation authorities.	Participatory process.
5.4 Support sustainable, wildlife-compatible livelihoods (e.g., agroforestry, NTFPs, ecotourism, conservation incentive schemes).	Nam Poui NPA MU and local partners	30,000 (per village)				x		x		x		x	• ≥ 60% of households in target villages enrolled in at least one supported wildlife-compatible livelihood programs • ≥ 3 types of initiatives launched (e.g., agroforestry, NTFPs processing, ecotourism, payment for conservation) within 3 years.	Participatory process.
5.5 Offer incentives and conservation-linked benefits (e.g., PES, community development funds).	Nam Poui NPA MU and local partners	20,000 (per village							x	x	x	x	• ≥ 80% of target villages or ≥ 60% of eligible households enrolled in conservation incentive programs within 3 years. • ≥ 1 conservation-linked agreement per participating village established. • ≥ USD 10,000 distributed annually through PES or village conservation funds (from donors or a sustainable finance mechanisms)	Participatory process. Payments or benefits tied to verified conservation outcomes

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
5.7. Engage and train community members in camera trapping and reporting signs of tigers or their prey.	Nam Poui NPA MU and local partners	35,000				x		x		x			• Number of community members trained in camera trapping and wildlife sign identification.	Participatory process.
5.8. Prepare Human-Wildlife Conflict mitigation plans including compensation schemes, livestock enclosures, and rapid response teams.	Nam Poui NPA MU and local partners	18,000 (per site)			x		x		x		x		• 80% of target villages with formal HWC mitigation plans developed and approved within 5 years. • Compensation/dispute resolution mechanism formally established and piloted. • Number of functioning community-based rapid response teams established • Number of conflict incidents reported and responded to within 48 hours	Participatory process.
Strategic Objective 6: Establish a robust monitoring, research, and adaptive management system.														
Actions:														
6.1 Model habitat suitability and corridor effectiveness to guide investment in restoration and protection.	Nam Poui NPA MU and local partners	10,000							x	x	x		• Habitat suitability model developed and validated using recent species presence data (e.g., camera traps, signs). • Number of decision-making tools (e.g., GIS maps, reports) produced to support investment planning • Stakeholder consultation workshops conducted to review and finalize maps and priorities	GIS-based analysis.

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
6.2 Monitor tiger dispersal and occupancy through camera trapping, genetic sampling, and community-based sightings	Nam Poui NPA MU and local partners	60,000 (per site)						x	x	x	x	x	• ≥ 100 active camera trap stations covering priority zones annually in key tiger habitats and corridors	Participatory process.
6.3 Establish a central database for tracking tiger and prey data, threats, and enforcement actions.	Nam Poui NPA MU and local partners	40,000 (per site)			x		x			x			• Central and site-based database platform developed and operational within 2 years.	Participatory process.
6.4 Partner with research institutions to study tiger ecology, movement, and prey dynamics.	Nam Poui NPA MU and local partners	40,000 (per site)						x	x	x	x	x	• At least 2 of formal partnership agreements or MoUs signed with research institutions within 5 years. • ≥ 3 joint research projects initiated on tiger ecology, or prey dynamics within 5 years.	Participatory process, with NGOs, research or education.
6.5 Develop and implement a long-term ecological monitoring framework to assess progress and adapt strategies.	Nam Poui NPA MU and local partners	20,000 (per site)	x		x		x			x		x	• A monitoring framework for tiger and prey developed, including number of key ecological indicators (e.g., species abundance, habitat condition). • A standardized protocol for monitoring of tigers and prey developed and applied.	Partnership with NGOs
6.6 Publish regular status reports to inform decision-makers, donors, and stakeholders.	Nam Poui NPA MU and local partners	5,000	x	x	x	x	x	x	x	x	x	x	Annual reports produced and distributed to stakeholders including donors.	Post online
Strategic Objective 7: Establish Sustainable Financing Mechanism														
Actions:														

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
7.1. Develop a financial plan and cost estimate (funding needs for PA man., current funding sources)	Nam Poui NPA MU and local partners	60,000	x			x			x			x	A financial plan and cost estimate framework for Protected Area (PA) Management, covering: • Cost Estimate and Funding Needs • Current Funding Sources • Funding Gap and Sustainability Strategy	Assessment each site
7.2. Identify and map stakeholders (developers, NGOs, donors).	Nam Poui NPA MU and local partners	30,000	x			x			x			x	A report of feasibility study on establishing a financial mechanism at each protected area or TCLs, which include identification of: • Government stakeholders • Current national financial mechanism • Donors • NGOs • Private sectors – e.g., hydropower or mining projects in TCLs.	Id. potential funding sources at each TCL or NPA.
7.3. Facilitate multi-stakeholder consultations to ensure buy-in and to clarify expectations, especially from the private sector.	Nam Poui NPA MU and local partners	70,000 (per site)	x	x	x				x	x			Reports summarizing consultation outcomes shared: • # of private sector entities consulted and expressing intent to collaborate. • # of stakeholders with defined roles/responsibilities documented in agreements or MoUs.	A series of stakeholders' consultation workshops
7.4. Formalize agreements with developers or Concession holders	Nam Poui NPA MU and local partners	30,000 (per site)	x	x	x				x	x			At least 1 MOU is signed with private sectors in TCL agreeing on financial	Payment aligns with CA.

Strategic objectives/Activities	Lead agency /partners ผู้รับผิดชอบ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
• Negotiate terms and conditions of payment (timing, amount, penalties for non-compliance • Ensure alignment with EIA/ESIA recommendations and government approval. • Sign Memoranda of Understanding (MoU) or legal contracts between PA authorities and project developers.													support for tigers or biodiversity conservation within 5 years.	
7.5. Establish Fund Governance and Financial Management System • Create transparent governance structures, including multi-stakeholder representation (gov., local communities, private sector). • Set financial management rules (e.g., auditing, procurement, disbursement, M&E).	Nam Poui NPA MU and local partners	30,000 (Per site)	x	x	x				x				A Site-specific financial mechanism established and functional.	Government approval of establishing a site-base financial mechanism in each TCL.
Strategic Objective 8: Institutional and staff capacity building														
8.1. Develop clear organizational structures, roles, and responsibilities for tiger recovery	NPAs/DOF	15,000	x	x									Units responsible for tiger recovery and enforcement at all levels given	

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
and enforcement at all levels (central, provincial, local) and recruit adequate staff.													adequate staff with appropriate capacity.	
8.2. Develop clear organizational structures, roles, and responsibilities for tiger recovery and enforcement at all levels (central, provincial, local), and ensure adequate staff with appropriate capacity.	DOF/Wildlife	15,000	x	x	x								By Year 3, national and site-level institutions responsible for tiger conservation demonstrate improved technical competence, operational effectiveness, inter-agency coordination, transparent finance management, and evidence-based decision-making, resulting in measurably improved protection, habitat management, and stakeholder engagement across priority tiger landscapes.	
8.3. Establish inter-agency tiger conservation task forces or committees at national and local levels - National/local Tiger Recovery Committee and Technical Working Groups.	DOF/Wildlife	30,000	x	x	x	x	x	x	x	x	x	x	• National Tiger Recovery Committee (NTRC) • Technical Working Groups (TWGs)	Minister' agreement
8.4. Facilitate regular coordination meetings and joint planning between government agencies and NGOs.	DOF/Wildlife and NPAs	25,000 (per site)	x	x	x	x	x	x	x	x	x	X	At least 4 coordination meetings held per year in each priority landscape (quarterly basis)	Meeting minutes
8.5. Training and Capacity Building: Conduct regular training programs on wildlife law enforcement, ecological monitoring, conflict resolution, and community engagement,	DOF/Wildlife and NPAs, NGOs	20,000 (per site)	x	x	x	x	x	x	x	x	x	x	≥ 85% of staff in Nam Poui and each priority TCL trained by functional area per year (e.g., law enforcement staff, data mangers).	Training and patrol reports

Strategic objectives/Activities	Lead agency /partners ผู้รับผิดชอบ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
wildlife crime investigation and prosecution.													% ranger teams certified competent in SMART data collection (Target: ≥75% Yr3; ≥90% Yr5)	
8.6. Support mentoring and exchange programs with successful tiger range countries.	DOF/Wildlife and NPAs, NGOs	20,000 (per site)	x	x	x	x	x	x	x	x	x	x	At least 2 of mentoring or exchange programs organized with partner tiger range countries.	Exchange visit to tiger source population,
8.7. Ensure operational logistics and equipment (e.g., GPS, cameras, patrol gear, offices, vehicles)	NPAs	15,000 (per site)	x	x	x	x	x	x	x	x	x	x	• Headquarter offices in Nam Poui and other key TCLs fully operated (Target: ≥80% Yr2; 100% Yr3). • % of patrol units fully equipped to operational standard (Target: ≥80% Yr3; 100% Yr5). • Spatial patrol coverage (% of priority protection zones patrolled at least once/month in dry & wet seasons; Target: ≥70% Yr3; ≥85% Yr5). • Detection rate of illegal activity per 100 sq.km patrolled decreases ≥25% from baseline by Yr5.	GPS, vehicles, cameras, drone SMART system, Standardize data flow: field → database → decision meetings.
8.8. Strengthen collaboration with NGOs, academic institutions, communities, and international partners.	NPAs	15,000 (per site	x	x	x	x	x	x	x	x	x	X	• At least 2 agreements/MoUs signed with NGOs and other private sectors by year 3. • # community conservation or co-management agreements signed in Nam Poui and other key TCLs.	MoUs
8.9. Mainstream tiger conservation into development planning and environmental impact assessments.	NPA, PEA, DOF/MAE	10,000 (per year)	x	x	x	x	x	x	x	x	x	X	• At least 3 national or provincial plans updated to include tiger conservation measures within 3 years.	

Strategic objectives/Activities	Lead agency /partners ຜູ້ຮັບຜິດຊອບ	Annual budget ງົບປະມານ	Years 2026-2035										Achievable Indicators ຕົວຊີ້ວັດ	Note ໝາຍເຫດ
			1	2	3	4	5	6	7	8	9	10		
													• 100% of EIAs for infrastructure or extractive projects within TCLs address tiger-related impacts. • At least 1 national guideline for integrating tiger conservation into EIAs and planning and 2 sector-specific briefs produced and adopted.	
8.10. Integrate tiger conservation into national biodiversity strategies (NBSAPs) and spatial development plans			x	x	x	x	x						• At least 2 national or provincial spatial plans integrate tiger conservation areas by Year 3 • At least 1 national-level tiger conservation planning document shared with spatial planning and land use agencies	
8.11. Strengthen collaboration with Thailand.	DOF/MAE	20,000 (per year)		x	x	x	x	x	x	x	x	x	• At least two bilateral coordination meetings with Thai counterparts on tiger conservation conducted annually • 1 joint action plan or MoU signed within 2 years • At least 1 exchange program or joint training event per year	

Annex 2. Roadmap to closing the tiger facilities in Lao PDR.

Roadmap to Closing Tiger Facilities in Lao PDR

2026

1. Executive Summary

This roadmap presents a comprehensive strategy for closing tiger facilities in Lao PDR. It closely adheres to the guidelines outlined in the 2023 Roadmap to Closing Captive Tiger Facilities of Concern [5], as developed and endorsed by a group of non-governmental organizations with expertise in wildlife conservation, animal welfare, illegal wildlife trade and captive wildlife care and management. Furthermore, it integrates recommendations from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) regarding the implementation of Article XIII and SC 77 Doc 41.2 on the illegal trade of Asian big cats. Specifically, it addresses the directive stated in Decision 14.69, emphasizing that Parties engaged in intensive tiger breeding operations on a commercial scale must take measures to limit captive populations to levels conducive solely to the conservation of wild tigers. Importantly, Decision 14.69 states that tigers should not be bred for the trade of their parts and derivatives.

Tiger facility[6], often disguised as zoos, are notorious for fueling the illegal trade in tiger parts. This illicit trade undermines global conservation efforts and increases poaching pressure on wild tiger populations by perpetuating demand and creating a parallel supply chain that facilitates the laundering of wild-caught tigers.

During a CITES mission to Lao PDR in February 2023, authorities reported that there was a total of 447 tigers in the Lao facilities.

During the CITES CoP 17, in September 2016, the minister of Ministry of Natural Resources and Environment (MONRE) made the announcement that Lao PDR would close tiger facilities in the country and adhere to the CITES convention recommendations.

The first stage in developing a plan to close the facility was to conduct an audit of all the tiger facilities to establish the number of tigers in each facility and to sample DNA from each individual tiger and link that to the animal’s unique stripe pattern photo record.

In 2018, a prime minister's order, PMO/05, was issued with a directive that existing tiger facilities would be converted to zoos for education and conservation.

At this current time, only two facilities are allowing public visitation and none meet the criteria of a zoo.

In November 2023, the CITES Standing Committee recommended that all Parties suspend commercial trade with Lao PDR in specimens of all CITES-listed species for commercial purposes until Lao PDR has substantially achieved several recommendations.
One of the CITES recommendation was to restrict breeding in the farms except for

[5] https://wwfeu.awsassets.panda.org/downloads/roadmap-jul-24.pdf?12131966/roadmap-to-closing-captive-tiger-facilities-of-concern

[6] A tiger facility is defined as a facility that keeps or breeds tigers in captivity with an intent (or reasonable probability) of directly engaging in the commercial trade in tigers and/or their body parts or derivatives. The application of this definition is not limited by the stated purpose of such facilities.

for specimens of tigers referable to the mainland Southeast Asian lineage (also known as *Panthera tigris corbetti*)
It is important to note that there is no known test that can accurately identify tigers to a sub-species level and an analysis of the DNA extracted during the first national audit was able to identify a substantial mixing of subspecies and a high level of inbreeding across all facilities.

The conclusion is that none of the tigers in Lao facilities can be identified as belonging to the *corbetti* subspecies and thus have no direct conservation value. Consequently, it is recommended that these tigers be desexed to prevent further breeding, which would impede the process of phasing out the facilities.

Recent genetic studies indicate that there are only two subspecies of tigers: the continental tiger (*Panthera tigris tigris)* and the Sunda tiger (*Panthera tigris sondaica*). This classification is backed by extensive genomic analyses, which have identified significant genetic differences between tigers on the Asian mainland and those on the Indonesian islands.

Therefore, future tiger recovery projects in Lao PDR would not need to focus exclusively on identifying pure Indo-Chinese tigers (*Panthera tigris corbetti*) for conservation and potential reintroduction. A conservation breeding program using Lao facility tigers is not recommended due to the high level of hybridization of subspecies and inbreeding.

This road map outlines the process required to close down the tiger facilities in line with CITES recommendations.

- Issuing an order for the facilities to stop and prevent breeding
- Establish an advisory committee
- Conduct a second national tiger facilities audit that includes desexing of tigers, extracting DNA that links to each tiger's individual stripe pattern identification.
- Develop protocols and SOPs for facilities inspections
- Develop and deliver capacity building modules for inspection teams
- Develop a management plan for each facility to:
  a. Convert facilities to legitimate zoos
  b. Transfer tigers to legitimate zoos or sanctuaries
  c. Euthanizing surplus tigers

It should be noted that introduction of tigers from tiger facilities directly to the wild should not be considered a viable solution in any phase-out plan.

The facility tigers are multi-generational captive born, have been habituated to humans and have no survival or hunting skills. Additionally, without adequate protected area that support the necessary density of prey species it would not be long before human or livestock attacks would result.

2. CITES and Article XIII Implementation

In September 2016, the Minister of the Ministry of Natural Resources and Environment (MONRE) represented Lao PDR at the 17th Conference of the Parties (CoP 17) and the 67th meeting of the CITES Standing Committee (SC 67) in Johannesburg, South Africa. During CoP 17, Minister announced that Lao PDR would close its tiger facilities and comply with CITES convention recommendations, marking the first and only country in the region to make such a commitment. This declaration was met with positive feedback from the international community.

On November 21, 2023, CITES issued Notification No. 2023/127, requesting that Parties suspend commercial trade in specimens of all CITES-listed species with Lao People's Democratic Republic until the country had substantially achieved a set of recommendations, many of which were related to tiger facilities.

Relevant recommendations include:

a. Complete the full audit of the tigers kept in captivity, including the analyses of DNA samples and photos to assist with identification of individual specimens.

b. Identify any pure specimens of tigers referable to the mainland Southeast Asian lineage (also known as *Panthera tigris corbetti*) and encourage facilities to engage in coordinated conservation breeding of such animals, if identified;

c. Take measures to limit the number of tigers to a level supportive only to conserving wild tigers by:

- restricting the breeding of tigers in captivity (sterilizing, separating male and female specimens), except for specimens of tigers referable to the mainland Southeast Asian lineage.
- not authorizing any further import of live tiger specimens, except for specimens of tigers referable to the mainland Southeast Asian lineage for conservation breeding purposes.
- prohibiting the establishment of any new tiger facilities;

d. implements stringent regulations for tiger husbandry standards to improve care and discourage expansion of captive-breeding facilities;

e. develops standard operating procedures for inspections and disposal of dead tiger specimens (including destruction of carcasses after verification of the dead individual) and train officials to undertake inspections and monitor the disposal of carcasses.

f. considers and implement relevant outcomes of the Big Cat Task Force Meeting with specific reference to section 2: Strengthen regulation of facilities breeding big cats in captivity to prevent and detect any illegal trade from such facilities and deploy strengthened enforcement measures;

g. Take measures to reduce the demand for tiger parts and derivatives through the implementation of campaigns and strategies

h. Establish an appropriate advisory committee or mechanism with involvement of the CITES Secretariat and other relevant organizations and partners to provide advice on the transformation of commercial tiger facilities.

i. Inspect the tiger captive-breeding facility that the Secretariat could not visit and report to the Secretariat.

All these recommendations will be addressed in this roadmap and corresponding national tiger recovery action plan.

3. Tiger Genetic Classification and Conservation Value

This is an important issue in relation to CITES recommendations and the closure of tiger facilities. A recommendation by the CITES Secretariat was to make efforts to identify any pure specimens of the Indo-Chinese subspecies that could be utilized for conservation breeding.

The Indochinese tiger historically ranged across Myanmar, Thailand, Cambodia, Lao PDR, and Vietnam. It is considered functionally extinct in Cambodia, Lao PDR, and Vietnam, with an estimated 221 Indochinese tigers remaining in the wild, primarily in Thailand.

There are no known captive breeding programs for this subspecies, which presents a challenge when considering a tiger recovery project in Lao PDR.

Most of the tigers in Lao PDR's tiger facilities have undergone DNA testing. However, the analysis cannot accurately identify the *corbetti* subspecies, partly due to a limited comparison database of known *corbetti* individuals. However, the data indicates substantial mixing of subspecies, and inbreeding, across all facilities.

Cambodia has launched an ambitious plan to reintroduce tigers, aiming to restore the species to the country's Eastern Plains. Tigers used in the recovery project have been sourced from India (*Panthera tigris tigris*) in line with the findings of the tiger reclassification study.

The results of the Cambodian recovery project should be carefully monitored as a learning mechanism for developing a similar recovery project in Lao PDR.

4. The Roadmap for Closing Tiger Facilities in Lao PDR

Step 1. Issue an order instructing facilities to immediately prevent continued acquisition and/or breeding by separation of male and female tigers.

Step 2. Establish an appropriate advisory committee with involvement of the CITES Secretariat and other relevant organizations and partners to provide advice on the transformation of commercial tiger facilities.

Step 3. Conduct a facility inspection to:

- Ascertain that steps have been taken to prevent continued breeding.
- Document expansion of facilities since the initial audit
- Document the number, sex, and approximate age of all of the tigers in each facility.
- Prepare logistics for a second national tiger farm audit as the previous audit was almost four years ago, consequentially much of the data is now obsolete.
- Ensure there is sufficient record-keeping and management at each facility.

Step 4. Develop protocols and Standard Operating Procedures (SOPs) for conducting routine facility inspections. This would include ensuring that:

- The inventory of tigers is consistent with previous inspections
- There is no evidence of breeding.
- There is no evidence of trade
- There is a protocol for deceased tigers and that any deceased tigers are accounted for and disposed of appropriately.
- Welfare standards are being met or exceeded.
- It is recommended that the cost of inspecting the facilities is borne by the registered farm owner in line with other commercial practices.

Step 5. Develop and deliver capacity-building modules for forestry and CITES officials on conducting facility inspections.

Once the protocols and standard operating procedures for facility inspections have been developed (from step 4), a capacity-building program, that includes on-job training, should be developed and delivered to relevant agencies.

Step 6. Conduct the second national facility audit

The audit would consist of:

- DNA sampling and stripe pattern recording of each tiger. The data on these unique identifiers should be linked to an individual tiger record. The information should be included in a regional database, that includes Thailand and Vietnam. These countries are also establishing DNA databases and a sharing of data will aid regional authorities to identify illicit tiger trade and close trafficking networks.
- Desexing (also known as sterilization or neutering) of tigers to prevent further breeding. Options include:
  a. Vasectomizing all male tigers (targets the vas deferens, leaving the testicles intact)
  b. Castrating all male tigers (complete removal of the testicles)
  c. Desexing females or both sexes
  d. Oral contraceptives and contraceptive implants.

Separation of sexes and contraceptive measures are not a viable option to permanently prevent breeding as this can easily be manipulated by tiger facility owners.

The recommended option is to castrate all male tigers. This is the most practical option as only 26% of the facility tiger population is male (per 2020 audit), the surgery whilst requiring a full anesthetic, is less intrusive than female sterilization and would require less resources. Regular facility inspections would be required to ensure that additional males do not enter the facility population.

Vasectomizing males is not recommended as it is not possible to determine visually that the male had been desexed. Chemical sterilization requires ongoing upkeep, which may not be carried out effectively by owners.

Microchipping of Tigers

The microchipping of captive tigers for identification purposes is not recommended due to the following reasons:

- The implantation procedure for adult tigers necessitates full anesthesia, which poses unnecessary risks to the animals.
- Safely reading implanted microchips is only feasible when the animal is anesthetized, making routine identification impractical.
- Microchips can be easily removed from deceased tigers, and their absence would not be noticeable in many body parts that could enter illegal trade.
- A DNA and stripe pattern record for each tiger, maintained in a central database, offers a more reliable and tamper-proof method for identifying individual tigers both in captivity and in cases of illegal trade.

Step 7. Develop a management plan for each facility that includes:

- Regular inspection (every 3 months) of all facilities including unannounced inspections pursuant to *Article 76 wildlife law 2023.* The inspections should follow the protocols from step 4.

Step 8. Develop plans for closing the facilities

The previous steps involve the development of policies and protocols for regular stringent inspection of facilities of concern, individually identifying and recording individual tigers and ensuring that there is no breeding or illegal trade.

When the government of Lao is able to demonstrate a transparent commitment to closing the facilities it is recommended that assistance from the international community is sought to relocate and care for tigers currently housed in the facilities. This should include animal welfare organizations, NGOs, embassies and other donors and philanthropists and would require strong media exposure. Any media should highlight the strong commitment by the government to close the facilities.

To demonstrate a strong and transparent commitment would require:

- Desexing of tigers to prevent breeding
- Regular and transparent inspections of all facilities to ensure stocking levels maintain consistent with records and that there is no evidence of breeding or trade.
- That all captive tigers are recorded on a national database that includes DNA and stripe pattern recording. The database should be made available to regional counterparts investigating tiger trafficking.
- Lao authorities actively investigate illegal wildlife trade and tiger trafficking networks.

A plan should be developed with clear timelines for the ongoing care of the confiscated or relinquished facility tigers. Options for relocating or managing the farm tigers include:

5. Convert tiger facilities to legitimate zoos.

In 2018, a prime minister's order, PMO/05, was issued with a directive that existing tiger facilities would be converted to zoos for education and conservation.

A modern zoo, according to the World Association of Zoos and Aquariums (WAZA), is dedicated to conservation, education, research, and recreation, focusing on high standards of animal welfare, creating naturalistic environments, and contributing significantly to biodiversity conservation through both ex-situ and in-situ efforts.

Converting a tiger facility into a zoo should only be considered after conducting a thorough business viability assessment. This assessment should account for the facility's demographic location and evaluate the projected financial sustainability based on anticipated income from visitors and related expenditures. A successful zoo requires appropriate infrastructure to accommodate the visiting public, such as restaurants, restrooms and other amenities.

A realistic number of tigers should be allocated for exhibition purposes, typically between 2 to 6 tigers. Zoos should be prohibited from keeping large numbers of tigers off display without a legitimate purpose.

It has been estimated that the cost of feeding a single tiger is approximately $10 per day, totaling $3,650 per year. For a zoo housing 100 tigers, this would amount to

$365,000 annually. When considering additional costs such as staff salaries, enclosure maintenance, and veterinary care, the total expenses could easily double.

Maintaining large numbers of tigers in a zoo is clearly not financially feasible.

6. Transfer to legitimate sanctuaries and zoos.

Where individual tigers are to be transferred to legitimate sanctuaries or zoos the IUCN Guidelines for the Placement of Confiscated Animals should be followed.

When considering a facility providing temporary or permanent care to animals, the following principles should be followed:

- providing excellent and humane care for their animals, following strictly established welfare criteria;
- if allowing visitors, this is not for the purposes of petting, selfies, or other interaction with the animals or live performances;
- having policies in place regarding ethical visitor tours, exhibition, acquisition and disposal;
- prohibiting all buying and selling of tigers and their parts and derivatives;
- prohibiting all breeding of tigers with the narrow exception of zoos contributing to conservation breeding as part of an established, science-based population management program, such as those following IUCN Guidelines on the Use of Ex Situ Management for Species Conservation.
- providing lifetime care or, if transferring to another facility, the receiving facility must also meet the above criteria.

In order to accommodate increased numbers of tigers, transferred from facilities, it may be necessary to build or expand facilities that meet the above criteria.

The reality is that most reputable zoos that house tigers, are usually fully stocked or else participate in conservation breeding programs for provenanced sub species. It is unlikely that many tigers would be relocated to existing reputable zoos.

Currently, there are no sanctuaries, with the resources or facilities to house tigers in Lao PDR. This would require substantial resources for the construction and upkeep of a suitable facility and substantial financial assistance would be required from the international community.

7. Euthanasia

Euthanasia is the humane ending of an animal's life for the intention of preventing further suffering of an animal. Where it is not possible for a captive tiger to be placed in a legitimate zoo or sanctuary, where the existing facility is not able to meet established criteria, or because of health reasons, then euthanasia may be recommended, with appropriate record keeping and disposal of carcasses. An external (independent) veterinarian should conduct assessments of each tiger to identify individuals which are suffering from poor health/illness/injury to determine if euthanasia is the most humane course of action. Ethical and cultural implications of euthanasia should be considered.

8. Note on the introduction of tigers to the wild

Introduction of tigers from tiger facilities directly to the wild should not be considered a viable solution in any phase-out plan.

The facility tigers are multi-generational captive born, have been habituated to humans and have no survival or hunting skills. Additionally, without adequate protected area that support the necessary density of prey species it would not be long before human or livestock attacks would result.

9. Conclusion

The government of Lao has made a strong commitment to close tiger facilities in Lao PDR in line with CITES directives. There are approximately 400 tigers being housed in 5-6 facilities in Lao PDR. If these facilities are allowed to continue breeding tigers the problem will only aggravate and any evidence of trade will damage the government's commitment to close these facilities. An immediate directive to separate the males from the females should be implemented. Routine and transparent inspections should be conducted to ensure that stocking levels are not exceeded, breeding is discontinued, and no tigers enter the illegal wildlife trade.

DNA analysis, taken from the previous audit, is unable to identify purebred Indo-Chinese tigers so all facilities tigers should be classed as hybrids with no conservation value. All male tigers should be desexed and routine inspections conducted to ensure compliance with the law.

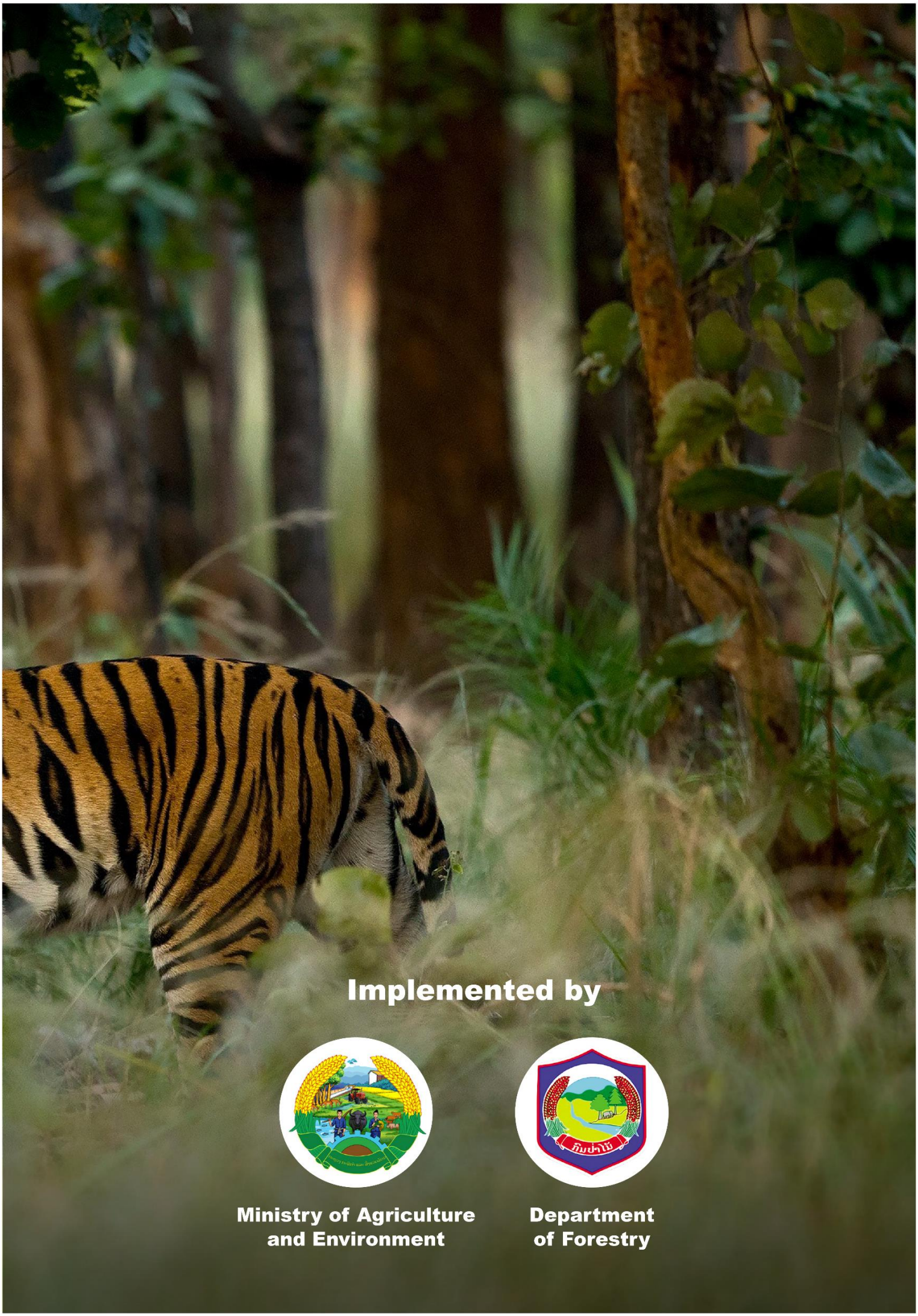
A second facility audit, that includes DNA extraction and stripe pattern recording, should be conducted so that each tiger can be individually recorded and added to a regional database.

Once these actions have been effectively and transparently conducted assistance should be sought from the international community for options and resources to rehouse facility tigers. This is unlikely to achieve support unless there is a demonstrated commitment to close these facilities and end tiger trafficking.

An assessment should be conducted to ascertain if a facility could be converted into a legitimate zoo, as per PMO/05. Any conversion to zoos should be in line with international zoo standards and must not contain excessive numbers of tigers that are not displayed.

Timeline

Activities and timeline in months	25-Feb	25-Mar	25-Apr	25-May	25-Jun	25-Jul	25-Aug	25-Sep	25-Oct	25-Nov	25-Dec	26-Jan	26-Feb	26-Mar	26-Apr
Preparation and planning															
Instruction for tiger farmers to separate sexes															
Conduct farm inspections															
Establish an advisory committee	Done														
Develop protocols and SOP for inspections															
Conducting audits, desexing and identification marking															
Conduct a national audit, desexing, microchipping															
Establishing national database of tigers															
Developing a management plan for the farms and tigers															
Review the findings of the national audit															
Farm owners conduct a business viability assessment for conversion to zoos															
Seek international support for tiger relocation															



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