



The Lao People's Democratic Republic
Peace Independence Democracy Unity and Prosperity

Ministry of Agriculture and Forestry
Department of Forestry

National Elephant Action Plan of the Lao PDR 2022 to 2032



March 2022



**The Lao People's Democratic Republic
Peace Independence Democracy Unity and Prosperity**

Ministry of Agriculture and Forestry

No:...../AF
Vientiane Capital, dated

**Ministerial Agreement
On adoption and promulgation of the National Elephant Action Plan
of the Lao PDR
2022 to 2032**

- According to the Prime Minister's Decree on the Organization and Responsibilities of the Ministry of Agriculture and Forestry No. 603/PM, dated 15 October 2021;
- According to the Ministerial Agreement on the Appointment of the Steering Committee and the Technical Committee to Develop the National Elephant Population Management Plan No. 2796/MoAF, dated 10 June 2019;
- According to the proposal of the Department of Forestry No. 2026/DoF, dated 28 March 2022;

The Minister of Agriculture and Forestry issues an agreement to:

Article 1: Approves and promulgates the "National Elephant Action Plan of the Lao PDR 2022 to 2032".

Article 2: Assigns the Department of Forestry, the Department of Forest Inspection and the Department of Livestock and Fisheries to collaborate with the stakeholders, both at central and local levels, to implement the National Elephant Action Plan of the Lao PDR from 2022 to 2032 effectively.

Article 3: Offices, departments, institutions, centres, all divisions of the Ministry, Provincial Agriculture and Forestry Offices, District Agriculture and Forestry Offices and related parties shall recognize, cooperate and implement this action plan effectively.

Article 4: This agreement is effective from the date of signing.

Minister of Agriculture and Forestry

Foreword

The Department of Forestry acts as the secretary to the Ministry of Agriculture and Forestry in organizing and modifying the policies of the party and the Government of the Lao PDR in the management and protection of forests, and conservation of aquatic and wildlife across the country, primarily the Asian elephant. The Asian elephant is listed in the protected category as defined in the Wildlife and Aquatic Law as, a highly important species that must be taken into consideration. This is because the Asian elephant plays an essential role in the ecosystem, and is of high value to our country's social-economic development and culture.

The National Elephant Action Plan is an essential tool for implementing the management, protection and conservation of the forests and wildlife and aquatic resources, primarily elephants, in order to be sustainable. The action plan covers the input of all parties, central and local public sector organizations, and international organizations (WCS, IUCN, WWF) that work on conservation in Laos through research at technical and national meetings. The essential information used in creating the action plan was derived from actual field surveys and information gathered from local forestry staff and villagers in each area. In addition, it incorporates technical ideas from experts with experience of working in the Lao PDR. The action plan sets out key tasks to demonstrate how to solve the human-elephant conflict (HEC) and the management, conservation and protection of elephants in order to be sustainable. It is a policy guideline and a reference to modify, adapt and align with the specific situation of each area affected by the elephants and human-elephant conflict.

I hope the National Elephant Action Plan will be modified and implemented practically and beneficially in the Lao PDR. I believe this National Elephant Action Plan will be a vital tool for providing advice on the management, conservation and protection of wildlife habitats, especially the Asian elephant population. However, this action plan's success shall be based on the cooperation of various public and private sectors, local authorities, and international organizations to work together to ensure that all activities in the National Elephant Action Plan are implemented based on the objectives and goals set. Furthermore, Lao people of all ethnic groups must work together to implement this action plan effectively.

Vientiane, March 22, 2022
Department of Forestry Director-General

Acknowledgements

The Department of Forestry would like to thank the experts and the committees responsible for creating this National Elephant Action Plan, who were involved in the research, for their valuable inputs, and for sharing their experiences while creating this National Elephant Action Plan of the Lao PDR. As a result, this action plan was established in accordance with the Wildlife and Aquatic Law No. 07/NA, dated 24 December, 2007, Law on Forestry No. 64/NA, dated 13 June 2019, and Prime Minister's order on the strengthening and strict implementation of the Management and Inspection of Prohibited Wild Fauna and Flora No. 05/PM, dated 8 May, 2018, and the financial support of the World Wide Fund for Nature (WWF) and the cooperation of the IUCN SSC Asia Elephant Specialist Group (AsESG).

The technical committee that has created the National Elephant Action Plan has made a significant contribution to the research under the direction of the Department of Forestry. In addition, the contributions of divisions within the Department of Forestry, National University of Laos, Department of Forest Inspection, Department of Livestock and Fisheries and Forestry sectors across the country, along with several foreign experts, especially Mr Yoganand Kandasamy from the World Wide Fund for Nature (WWF) in the Lao PDR; other international organizations have also contributed significantly with their support and cooperation, mainly: WCS, ICBF, BCC, IUCN, CCL and UNDP.

This action plan is the responsibility of the Division of Aquatic and Wildlife Management led by Mr Sounnatha Chounlamany, Mr Chanthone Phothitai, and Mr Bounthavy Manivong. It also includes experts from the World Wide Fund for Nature (WWF), especially Mr Khamkhoun Khounbolin, who collected the data from all parties involved, mainly provincial and district officials, in order to develop the National Elephant Action Plan effectively.

Thank you

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Abbreviations

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DOF	Department of Forestry;
DOFI	Department of Forest Inspection;
DLF	Department of Livestock and Fisheries;
EPF	Environment Protection Fund;
FAO	Food and Agriculture Organization;
IUCN	International Union for Conservation of Nature;
Lao-WEN	Lao Wildlife Enforcement Network;
MAF	Ministry of Agriculture and Forestry;
MIKE	Monitoring the Illegal Killing of Elephants;
NEAP	National Elephant Action Plan;
PAFO	Provincial Agriculture and Forestry Office;
P-WEN	Provincial Wildlife Law Enforcement Network;
WCS	Wildlife Conservation Society;
WWF	World Wide Fund for Nature.

Definitions

1. **Mammals** refers to aquatic and wild life that give birth to their babies and feed them milk; such as dolphins, elephants, tigers, monkeys, bats, Laotian rock rats (*Kha-ynou*), and other animals.
2. **Species** refers to a group of animals with similar characteristics and that can reproduce.
3. **Aquatic and wildlife habitats** refers to natural living and breeding areas such as forests, grassland, caves, mineral-lick areas, rivers, marshes, streams, lakes, ponds or riverscapes.
4. **Conservation** refers to the preservation and utilization of aquatic and wildlife with the principle of management to achieve the purpose of long-lasting availability and usage.
5. **Protection** means strict protection of aquatic and wildlife faunas not to be destroyed and become extinct.
6. **Aquatic and wildlife species conservation areas** refers to forests, forest land and water sources, designated as habitats of aquatic and wildlife under regulations.
7. **Convention** refers to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, of which the Lao People's Democratic Republic became a member on 30 May 2004.
8. **Prohibited aquatic and wildlife** refers to aquatic and wildlife categories that are defined in the first category list as rare and endangered animals.
9. **Aquatic and wildlife hunting** refers to hunting, shooting, killing, trapping, chasing or other hunting methods.
10. **Ecosystems** refers to the relationship between living and non-living things that exist naturally
11. **Biodiversity** refers to the diversity of ecosystems, various organisms and species such as plants, animals, insects and microorganisms.

Part I Introduction

1.1 Overview

The Lao PDR is located in South East Asia in the heart of the Indochina Peninsula and covers an area of 236,800 square kilometres. It is a landlocked country that borders five others: China to the north, Vietnam to the east, Cambodia to the south, Thailand to the west and Myanmar to the north-east. The country has a population of just over 7.1 million with a density of 26.7 people per square kilometre (National Statistical Center, 2019).

The Lao government identifies 16.5 million hectares of forest land, which is classified into three categories for its management, protection, development and use: (i) protection forests, (ii) conservation forests and (iii) production forests. Of these, there are 25 national conservation forests, covering an area of 3.8 million hectares, 49 national protection forest areas, covering 4.7 million hectares, and 59 production forest areas, covering 3.1 million hectares. The Lao PDR, which has a forestry coverage rate of 62% (Information 2019), is a country rich in natural resources and forests, considered “green gold”, with a unique and rich biodiversity at the heart of the Indochina Peninsula. With its geographical characteristics, the Lao PDR has become a crucial habitat for aquatic and wild life, some of which are found nowhere else.

Currently, there are two categories of elephant in the world: the African elephant (*Loxodonta africana*) and the Asian elephant (*Elephas maximus*). The Asian elephant can be found in over 13 countries in Asia and has been domesticated and used in the day-to-day life of local people for centuries. It is a large plant-eater species found in three densely forested areas of Lao PDR, where it is the national animal and represents a lifestyle and tradition linked to the beliefs of the local people.

Elephants have a key role in maintaining the natural forest ecosystem and are highly valuable for socio-economic development, culture, the environment and science education throughout the country. The elephant is a protected wildlife species under the Wildlife and Aquatic Law, and is classified as highly valuable, rare and almost extinct. It is also defined in the Prime Minister's Decree No. 08/PM, dated 25 February 2021, on the adoption of the categories list of protected aquatic and wildlife or List I and the management categories List II. Elephants are on List I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 2013), of which the Lao PDR became a member on 30 May 2004. The elephant is also defined by the International Union for Conservation of Nature (IUCN, 2008) as an endangered species that should be managed, inspected, conserved and protected in the Lao PDR.



Figure 1 The map of Lao territory© LaosCountry

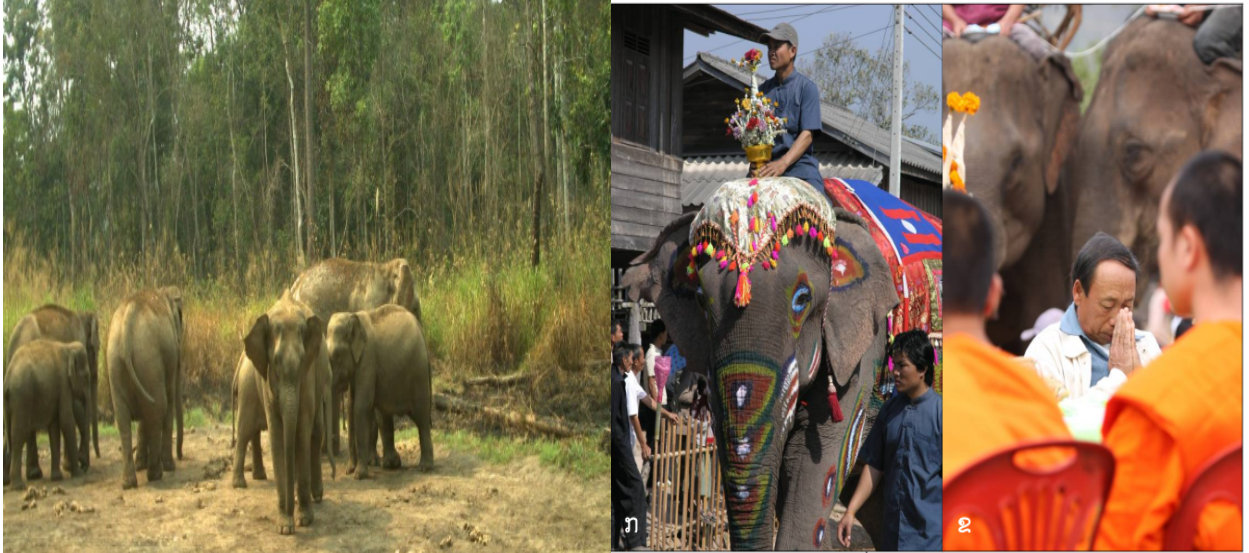


Figure 2: Elephant roles in Lao culture.

Currently, there are approximately 300 to 400 wild elephants in the Lao PDR (Department of Forestry, 2020) living in mixed forests, mixed jungles and mixed high-land forests. These areas lie within and outside of three categories of forest, covering vast parts of the Lao PDR in 14 provinces: (1) Phongsaly Province (national conservation areas, national protection areas), (2) Oudomxay Province (Phou Thein Provincial Protection Forest), (3) Luang Namtha Province (Nam Ha National Protected Area), (4) Huaphan Province (Nam Sam National Protected Area and Nam Et–Phou Louey National Park), (5) Xayabouly Province (Nam Pui National Protected Area), (6) Vientiane Province (Sanakham district areas and Feung district area), (7) Vientiane Capital (Phou Pra Nang National Protected Area), (8) Borikhamxay Province (Nam Kading National Protected Area and the provincial protected forest area in Phou Ngou), (9) Khammuan Province (Nakai–Nam Theun National Park, Kham Khun and Boualapha districts), (10) Savannakhet Province (Dong Xang Hae National Protected Area and Dong Phou Vieng Protected Area), (11) Saravan Province (Xe Bang Nouan National Protected Area), (12) Champasak Province (Dong Khan Thoung Protected Area, Paksong district); (13) Sekong Province (Kaleum district and Annamite Mountain Range connected to Paksong district) and (14) Attapeu Province (Dong Ampharm National Protected Area and Nam Kong Protected Area).

Currently, there are 464 domesticated elephants in the Lao PDR, of which 381 are in Sayabouly Province, 21 in Luang Prabang Province, 6 in Oudomxay Province, 7 in Bokeo Province, 5 in Vientiane Province, 1 in Borikhamxay Province, 3 in Saravan Province, 27 in Champasak Province and 13 in Vientiane Capital (Department of Livestock and Fisheries, 2020).

Map showing wild elephant distribution and population estimation in the Lao PDR 2021

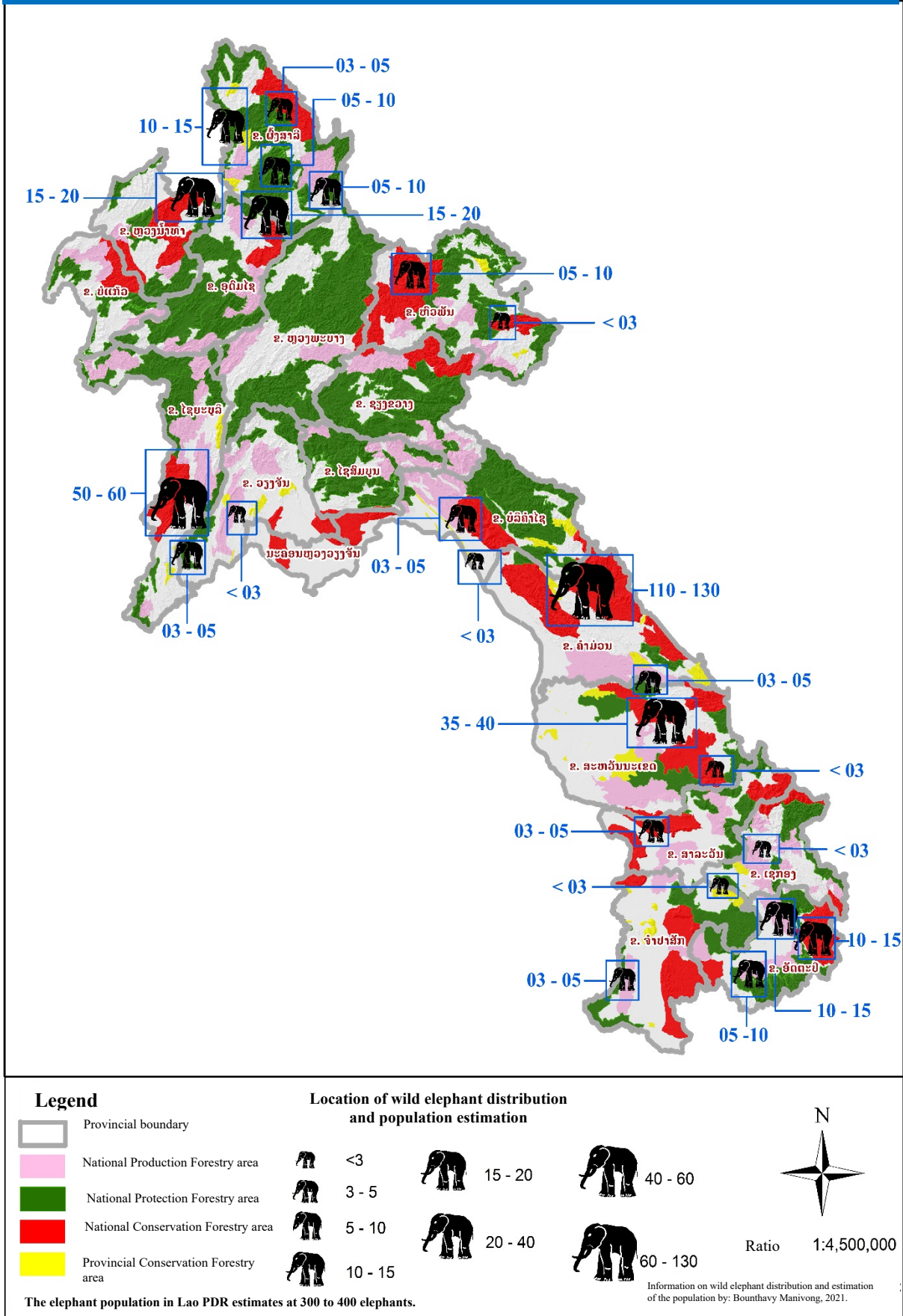


Figure 3 Distribution of wild elephants in the Lao PDR.

1.2 Elephant population management

The government has established 25 national protected areas to manage and protect biodiversity, especially rare and endangered wildlife. The Nakai–Nam Theun National Park and Nam Pui National Protected Area have been designated as the IUCN's Monitoring the Illegal Killing of Elephants (MIKE) since 2010.

The government, represented by the Ministry of Agriculture and Forestry, has coordinated with relevant parties, both national and international organizations, especially local authorities and local people, to participate in the management, protection, inspection and conservation of the elephants and their habitats to ensure their sustainability by establishing various laws and legislations as follows:

- 1) Wildlife and Aquatic Law No. 07/NA, dated 24 December 2007, sets out the list of aquatic and wildlife in categories for prohibition, management and general management.
- 2) Law on Forestry (Amendment) No: 64/NA, dated 13 June 2019, sets out policies on forestry management, protection, development and utilization, in particular the allocation of forest management areas to biodiversity conservation and wildlife habitats.
- 3) Law on Livestock Production and Veterinary Matters (Amendment) No: 08/NA, dated 11 November 2016, sets out the principles, veterinary regulations and measures for the development, health, genetics and resource conservation of livestock and livestock welfare and food safety, with the aim of increasing the quantity and quality of animal products and environmental protection. This enables integration at regional and international levels, contributing to food security and the production of green, clean and sustainable agricultural goods.
- 4) Decree on the Establishment of National Protected Areas No. 164/PM, dated 29 October 1993, sets out the establishment of 18 national protected areas; of which two were announced in 1996, four in 2012, and one in 2020. There is now a total of 25 national protected areas.
- 5) Convention on International Trade in Endangered Species of Wild Fauna and Flora, dated 23 March 1973, and amended on 22 June 1979. The Lao PDR became a member on 30 March 2004, setting out a list of categories of aquatic, wildlife and wild plants (List I, II, III), especially the Prohibition Category List I, which includes the Asian elephant to be protected against trading, including its parts and products.
- 6) Prime Minister's Order on Strengthening the Strictness of the Management and Inspection of Prohibited Wild Fauna and Flora No. 05/PM, dated 8 May 2018.
- 7) Ministerial Decree on the Adoption and Promulgation of the Action Plan on Prevention and Combatting of Aquatic and Wild Life Crimes of the Lao PDR from now until 2025 No. 0654/MoAF, dated 30 March 2018. The decree allows for modifying the law on marine life and wildlife in detail and strengthening the procedures, methods and actual implementation measures, which are the responsibilities of the Lao Wildlife Enforcement Network (Lao-WEN).
- 8) Ministerial Decree on Livestock Registration No. 1974/MoAF, dated 23 August 2012. This decree determines the principles, regulations and measures for the implementation of livestock registration in the Lao PDR in order for the precise collection of livestock statistics, the management of livestock flocks, the protection of the interests of livestock operators, the facilitation of the monitoring and inspection of the purchase and trade of domesticated livestock, and ensures legal compliance in their transportation and export.
- 9) National Ivory Action Plan of the Ministry of Agriculture and Forestry, dated June 2020. The Action Plan modifies the Wildlife and Aquatic Law and complies with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), of which the Lao PDR is a member.

1.3 Cooperation

1.3.1 National cooperation

In the management, conservation and protection of elephants, the Ministry of Agriculture and Forestry collaborates with stakeholders at both central and local levels. The actual implementation is carried out by the relevant sectors of the province, district, village and community. The Ministry also cooperates with social and international organizations in the Lao PDR.

1.3.2 Regional and international cooperation

In the conservation of the elephant population and its habitats, the Ministry cooperates at regional and international level, particularly with the countries bordering the Lao PDR and those with Asian elephants, and with international organizations at both national and international levels, especially Monitoring the Illegal Killing of Elephants (MIKE), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), International Union for Conservation of Nature (IUCN SSC) and Asian Elephant Specialist Group (AsESG), on funding and technical support.

Part II Threats and Challenges

2.1 Threats to the elephant population

In the past, despite the government paying attention to the management, conservation and protection of elephants by issuing various laws and legislations, the illegal killing and hunting of elephants was still practised, as was the destruction of their habitats. This was mainly due to the development of infrastructure in the habitats of both wild and domesticated elephants, causing that loss of habitat.

2.1.1 Elephant killing and hunting

The killing and hunting of elephants for their ivory and other body parts for commerce and consumption is intentional. However, in some cases, unintentional killing and hunting of elephants occurs when there is human-elephant conflict. This is done to protect the lives and property of the local people. Therefore, many elephants have been killed across the country (statistics from 1985 to date show a total of 133 elephants killed, averaging 2 to 5 elephants per year) as shown below:

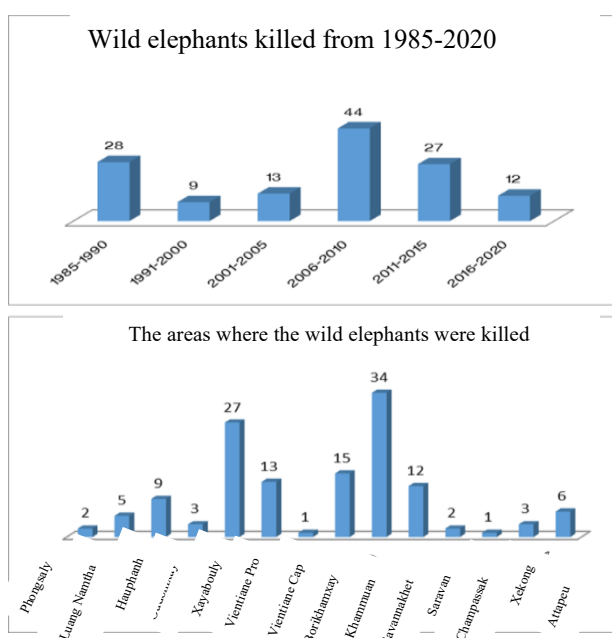


Figure 4 Statistics and areas where elephants were killed each year

No	Provinces	Numbers
1	Phongsaly	2
2	Luang Namtha	5
3	Hauphanh	9
4	Oudomxay	3
5	Xayabouly	27
6	Vientiane Province	13
7	Vientiane Capital	1
8	Borikhamxay	15
9	Khammuan	34
10	Savannakhet	12
11	Saravan	2
12	Champassak	1
13	Xekong	3
14	Attapeu	6
Total		133

2.1.2 Infrastructure construction

The construction of infrastructure is one of the factors that has caused elephants to lose their habitats to land invasion, in addition to the transformation of forest land for other purposes, such as hydropower dams, mining projects, road construction, electric cable lines, production areas and the settlement of local people. These factors narrow, reduce and fragment the areas of elephant habitat and their food sources.

2.2 Challenges to the management of the elephant population

The management, conservation and protection of the elephants and their habitats in the Lao PDR is based on the involvement and support of various sectors for both budgetary and technical support. However, there has been insufficient support to meet the demands of this volume of work to date, resulting in many challenges. Presently, five main issues need to be addressed urgently: (1) information for wild elephant management; (2) staff capacity building; (3) the habitat destruction of wild elephants; (4) human-elephant conflict; (5) campaigns and involvement.

2.2.1 Elephant management information

In the past, the WWF and the WCS have supported elephant population management in the Nakai–Nam Theun National Park and Nam Pui National Protected Area, especially with the elephant population survey, which is the only available source of information in specific areas. The ELEFANTSIA project encourages the registration of domesticated elephants and their health condition; however, it is insufficient for managing, conserving, and protecting the habitats of both wild and domesticated elephants across the country. The study of elephant behaviour enables the research of wild and domesticated elephants and their ecosystems across the country. However, the study of wild elephants indicates the lack of information linked to elephant conservation activities, field data, scientific data, social data and data analysis. It lacks the technology – mainly radio and satellite – to manage and monitor elephant movements. Therefore, there are requirements to achieve this goal, mainly that of sharing lessons on elephant population management, including environmental protection. There is also insufficient empowerment for the stakeholders to carry out these activities.

2.2.2 The destruction of the elephants' habitats

Each year, the forests in the Lao PDR are reduced due to the encroachment and transformation of forest areas for other purposes. These include the construction of infrastructure, agricultural land expansion, land encroachment, slash-and-burn cultivation, etc. Forest management is also limited by budget, technology and personnel who are in charge of forestry, especially the organizational improvement. Staff deployment is mainly implemented at the central and provincial levels and has not yet been implemented at the district and field work levels. There is a lack of full-time forestry staff, resulting in poor formulation and implementation of policies, ineffective legislation on forestry management, and aquatic and wildlife management not being comprehensive. The ownership and responsibility of forest management has not been effective, leading to the encroachment of available forest areas.

2.2.3 Human-elephant Conflict

Human-elephant conflict has intensified, resulting in a loss of the elephants' habitat. The resulting food shortages have caused elephants to destroy property and crops. Many local people are injured and killed each year, as shown in Tables 2 and 3:

The number of people killed by wild elephants 2000-2021			
No	Provinces	Number of people killed	Year
1	Phongsaly	2	2017
2	Luang Namtha	1	2006
3	Oudomxay	1	2014
4	Sayabouly	5	2015, 2016; 2017
5	Vientiane province	3	2005
6	Vientiane Capital	1	2019
7	Borikhamxay	2	2003;2013
8	Khammuan	4	2000;2001;2020
9	Savannakhet	3	2014, 2015, 2016
Total		22	

Table 2 Local people killed by elephants each year.

Number of villages having human-elephant conflict throughout the country 2021		
No	Provinces	Numbers of villages
1	Phongsaly	40
2	Oudomxay	10
3	Luang Namtha	6
4	Huaphanh	6
5	Sayabouly	19
6	Vientiane Province	5
7	Vientiane Capital	3
8	Borikhamxay	10
9	Khammuan	54
10	Savannakhet	46
11	Champassak	10
12	Sekong	10
13	Saravan	3

Table 3 The number of villages experiencing human-elephant conflict each year

2.2.4 Campaign

Many campaigns raise awareness of forestry, and aquatic and wildlife management among local people. However, this is not enough, especially in villages and among local people whose lives depend on the forest. Therefore, awareness campaigns are essential and should be taken seriously by encouraging each stakeholder to establish mechanisms and methods for encouraging local communities to acknowledge, understand, value, and participate in the management, conservation and protection of wild elephants and their habitats.

2.2.5 Participation

The management, conservation, protection and addressing of human-elephant conflict is the obligation of all stakeholders from central to local levels, including educational institutions, relevant business operators, international organizations, and the regional and bordering countries. All of these stakeholders need to cooperate, coordinate and manage the conservation and protection of the elephants and their habitats.

2.3 Analysis and identification of problems

The identification of threats to the Asian elephant population and the challenges faced in ensuring its conservation involves the analysis of issues, threats and challenges based on the impacts of the actual implementation as follows:

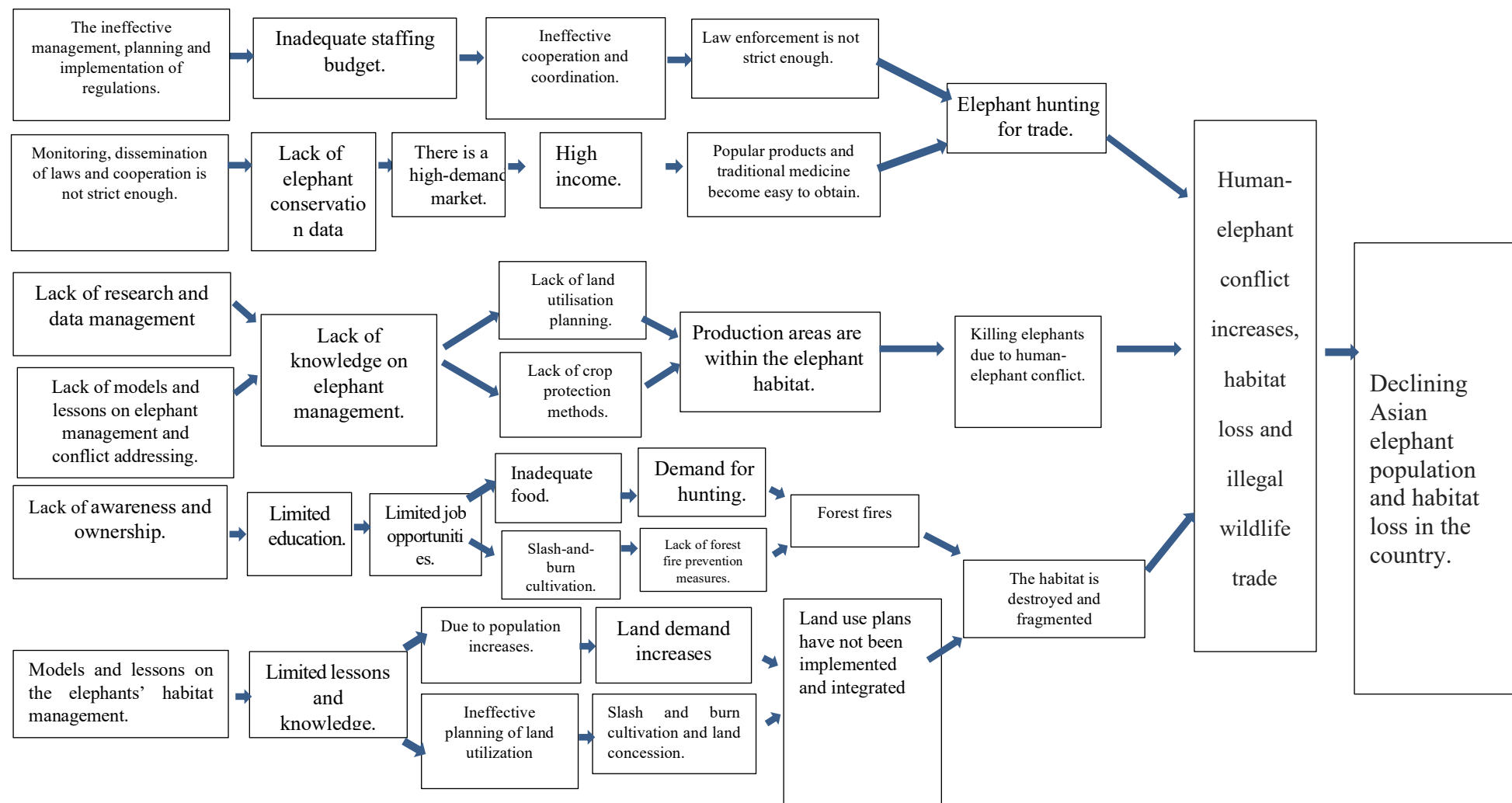


Table 4: Analysis of the issues.

Part III Vision 2022 to 2032

3.1 Vision

The National Elephant Action Plan (NEAP) of the Lao PDR from 2022 to 2032 aims to ensure the stability and increase the population of wild and domesticated elephants, with community involvement in the management, conservation and protection of elephants and their habitats.

3.2 Goals

To ensure that the populations of both wild and domesticated elephants grow, and the process is managed, preserved and protected across the country to ensure that elephants do not become extinct. It aims to reduce human-elephant conflict (HEC), as well as identifying the management and improvement of elephant habitats.

3.3 Benefits

1. To ensure that the population of wild and domesticated elephants are managed, conserved, and protected, and their habitat is sustainable, reducing human-elephant conflict
2. To act as a guideline to implement the management, conservation and protection of wild and domesticated elephants and their habitats across the country.
3. To empower the state organisations and stakeholders in the management, conservation and protection of wild and domesticated elephant populations, including their habitats, with public involvement.

Part IV National Elephant Action Plan

4.1 National Elephant Action Plan

The National Elephant Action Plan of the Lao PDR from 2022 to 2032 consists of six programmes with 23 focused tasks:

1. Wild elephant habitat and food sources protection programme.
2. Human-elephant conflict mitigation programme.
3. Illegal elephant killing and elephant-product trading prevention programme.
4. Law and regulatory implementation programme.
5. Staff training programme on wild and domesticated elephant management.
6. Elephant conservation campaign and awareness creation programme.

4.1.1 Wild elephant habitat and food sources protection programme

The expansion of production areas and the transformation of forest land into other categories – such as infrastructure construction, hydropower, mining, roads, electricity cable lines and resettlement – causes the elephant habitat to be reduced, degraded, and fragmented. Therefore, to protect the elephants, it is necessary to have a proper strategy to address the issues and limit those impacts.

Focus tasks:

1. Assess the status and habitat of the elephants.
2. Assess potential threats and risks.
3. Identify wild elephant conservation and corridor areas.
4. Restore habitat and food sources for wild elephants.

Activities:

1. Survey the population of wild elephants, their habitat and distribution, and evaluate their current status.
2. Assess the natural abundance of habitat for the wild elephants in each area.
3. Assess the risks affecting the habitat of the wild elephants in each area.
4. Inspect and monitor the encroachment into the wild elephants' habitat.
5. Identify the conservation areas and corridor areas and create maps.
6. Protect the habitat of wild elephants.
7. Increase the habitat abundance, such as plantations, for wild elephants and build water reservoirs and create artificial mineral lick areas.

4.1.2 Human-elephant conflict (HEC) mitigation programme

In the past, wild elephants have destroyed the crops, property and livelihoods of local people living in forests and surrounding areas. This is due to hunting and the invasion of the habitat of wild elephants, causing human-elephant conflict. Therefore, it requires an appropriate solution to mitigate such conflicts.

Focus tasks:

1. Collect information on wild elephant migration/movement and locations where human-elephant conflict has occurred.
2. Develop a plan to prevent and stop the human-elephant conflict.
3. Address the human-elephant conflict and compensate for the damages.

Activities:

1. Collect wild elephant migration/movement statistics and the location of occurrence.
2. Develop a plan to prevent and stop human-elephant conflict.
3. Review the lessons learned in addressing human-elephant conflict within the country and internationally.
4. Create direction and guidelines to address human-elephant conflict.
5. Empower technical staff and local people to prevent and solve human-elephant conflict.
6. Monitor, inspect and observe the migration of wild elephants.
7. Create a variety of preventative methods, such as electric fences and tree plantations as protective fences; set alarms and build surveillance towers to observe the migration of wild elephants and other animals.
8. Encourage local people to grow crops that wild elephants do not like to eat, such as chilli, ginger and coffee, as protective fences to prevent wild elephants from destroying local people's crops.
9. Improve livestock species and promote agricultural production techniques.
10. Develop options for income generation and food sources to reduce natural resource dependence.
11. Establish a network and village marketing system to promote domestic production.
12. Develop a sustainable financial mechanism for elephant conservation.
13. Improve and review the village regulations and set up a wildlife elephant protection team.

4.1.3 Illegal elephant killing and elephant-product trading prevention programme

Elephant hunting and the trade in elephant products is part of a vast network, both domestically and internationally, causing the elephant population to decline each year. Therefore, it is necessary to empower the officers in the investigation and prevention of illegal hunting and poaching of wild elephants, including international crime networks and the illegal trade of elephants and elephant-products on social media.

Focus tasks:

1. Prevent the illegal killing of elephants and the elephant-product trade.
2. Create an information provider network to track the illegal killing of elephants and elephant-product trade.

Activities:

1. Assess the number of hunters, the level of elephant hunting and the trade in elephant products.
2. Monitor the elephant hunting and elephant-product trade.
3. Create the capacity for the officers to inspect and detain offenders (based on the Lao-WEN, P-WEN action plan).
4. Train community inspection teams in the prevention of elephant hunting and elephant-product trade.
5. Classify the levels of elephant hunters, their networks and hunting equipment.
6. Provide resources to carry out field work, such as staff and equipment.
7. Create guidelines for establishing and managing information providers in high-risk areas.
8. Establish a confidential system for reporting illegal elephant hunting and trading.
9. Develop a reporting system on elephant migration/movement in the target villages.

4.1.4 Law and regulatory implementation programme

The monitoring, inspecting, preventing, investigating and prosecuting of offenders relating to the illegal trading of elephants and elephant products has not been implemented strictly, and many cases of elephant killing have not been prosecuted or resolved. Therefore, it is necessary to strengthen the capacity and implementation standards of the forestry officers, the Lao Wildlife Law Enforcement Network (Lao-WEN), and Provincial Wildlife Law Enforcement Network (P-WEN).

Focus tasks:

1. Assess the capacity of officers and authorities in the investigation and prosecution of offenders involved in elephant hunting and trade in elephant parts.
2. Empower the forestry officers to investigate and prosecute those who are involved in the illegal trade of products from elephants.
3. Improve the coordination and collaboration of the Lao-WEN and P-WEN Coordinating Committees.

Activities:

1. Empower the officers in the investigation and prosecution of perpetrators of illegal elephant hunting, killing and trading.
2. Coordinate and share information and experiences on the legal implementation of the sectors.
3. Study the field and share knowledge of the investigation and prosecution with neighbouring countries.
4. Organise the investigation and prosecution of cases related to the destruction of elephant populations and their habitat.

5. Improve coordination between the forestry protected area offices and other sectors in implementing the laws.
6. Create a contract to conserve the elephant population with communities in the target villages.

4.1.5 Staff training programme in domesticated and wild elephant management

Manage the monitoring, registration, embedding, identifying and microchipping of domesticated elephants. The research on the ecosystem, health and propagation has not been well implemented and there is still a lack of data and specific techniques, therefore further staff training is necessary.

Focus tasks:

1. Monitor wild elephant migration by using GPS collaring.
2. Study the elephant ecosystem.
3. Research, collect and evaluate data on elephant populations every 5 years.
4. Manage elephant habitats along national borders.
5. Register and microchip domesticated elephants and monitor their relocation.
6. Establish a rehabilitation, treatment, healthcare and propagation centre for elephants.
7. Establish and improve the mechanism for monitoring, relocating, importing-and-exporting and living-condition-monitoring of Lao elephants in foreign countries.

Activities:

1. Survey and identify priority areas in monitoring the movement/migration of wild elephants.
2. Provide training for staff in the usage of GPS collars to track the movement of wild elephants.
3. Appoint specific technical staff for the anaesthesia darting of elephants, enabling staff to monitor their health, and register and embed GPS collars to track their movement.
4. Survey and embed GPS collars to monitor the movement of wild elephants.
5. Provide training for provincial officers and villagers in looking after, raising and breeding domesticated elephants, and monitoring their health during the sub-seasons to prevent potential damage caused by human-elephant conflict.
6. Create guidelines on the management of wild and domesticated elephants (status, health, and microchipping).
7. Study the elephant ecosystem and epidemic diseases of wild elephants.
8. Inspect and monitor the population of domesticated elephants in the Lao PDR and elsewhere.
9. Develop an elephant management cooperation plan along the borders and share an information system.
10. Organise meetings on the management of elephants and their habitats every year.

4.1.6 Elephant conservation campaign and awareness creation programme

The management and care of the elephant population and the protection of their habitat has not received due attention. This lack of responsibility has led to a diminishing elephant population each year. Therefore, it is necessary to have a strategic plan in place to campaign for elephant conservation among local people and tour service providers, to create better living conditions for elephant populations, propagation and reduced human-elephant conflict (HEC).

Tasks:

1. Strategic campaign to raise awareness of elephant management and conservation.
2. Create a team to implement the campaign and raise awareness of elephant conservation.
3. Increase cooperation and sharing of development plans with investors in the elephant conservation and eco-tourism sectors.

Activities:

1. Develop elephant conservation campaign activities.
2. Establish a central and provincial team for a specific elephant conservation campaign.
3. Create conservation campaign lessons at public school level.
4. Create short plays, posters, television and radio broadcasts about elephant conservation
5. Organise campaigns and raise awareness for government staff, military, police, students and local people on laws relating to elephant conservation.
6. Develop a collaborative plan and increase coordination with the infrastructure development projects regarding the elephants' habitat.

4.2 Responsibilities

To ensure the achievement of the objectives and goals of the action plan, responsibilities are allocated to the levels of management as follows:

1. At central level, it is managed by the Ministry of Agriculture and Forestry, and it assigns the Department of Forestry, the Department of Forest Inspection and the Department of Livestock and Fisheries to be central and directly responsible for the cooperation and coordination with stakeholders, both public and private sectors, including national and international organisations and local people of all ethnic groups, to implement the National Elephant Action Plan.
2. At local level, it is managed by the Provincial Ministry of Agriculture and Forestry Office, and it assigns the forestry sector, provincial protected areas management unit, forest inspection unit, and the livestock and fisheries sector to coordinate with the district Agriculture and Forestry offices, district administrative offices, police officers, military, tax offices, trade offices, tourism offices, international organisations and social organisations to implement the management and conservation of elephants and the habitat of wild and domesticated elephants.
3. The District Agriculture and Forestry Offices assign the forestry unit, forest inspection unit and veterinary and livestock units to coordinate and collaborate with the village administration offices and local people on the implementation of the management and conservation to preserve the elephants and their habitats sustainably.

4. Village authorities and local people whose lives depend on the forest and forest resources are the practitioners in managing, conserving, and protecting wild elephants and their habitat in their area.

4.3 Budgets

In order to achieve the National Elephant Action Plan of the Lao PDR from 2022 to 2032 as described, the budget required to implement the activities would be a total of US\$ 11,700,000 (eleven million seven hundred thousand United States Dollars) as detailed below:

Programmes	Budget required USD
Programme 1: Wild elephant habitat and food sources protection	3,200,000
Programme 2: Human-elephant conflict mitigation	2,200,000
Programme 3: Illegal elephant killing and elephant-product trading prevention	400,000
Programme 4: Law and regulatory implementation	1,000,000
Programme 5: Staff resourcing and training on wild and domesticated elephant management	3,500,000
Programme 6: Elephant conservation campaign and awareness creation	1,400,000
Total	11,700,000

Table 2 Budget for the Action Plan for the period 2022 to 2032

4.4 Sources of funding

The National Elephant Action Plan of the Lao PDR from 2022 to 2032 shall be funded by the elephant management and conservation programmes, both nationally and internationally, such as the annual state budget, Environmental Protection Fund (EPF), Forestry Protection Fund (FPF), relevant business operators, international organizations and other sources of funding.

Part V Implementation and Evaluation

5.1 Implementation

The successful implementation of the National Elephant Action Plan aims to increase the population of both wild and domesticated elephants to ensure they and their habitats are managed, conserved and protected in a sustainable manner and to reduce human-elephant conflict. Therefore, it is advised to appoint responsible committees at central, provincial and district/municipality level to allocate the responsibilities of each to achieve the successful implementation of the National Elephant Action Plan of the Lao PDR from 2022 to 2032.

5.2 Monitoring, evaluation and reporting

5.2.1. Monitoring

To ensure the efficiency and effectiveness of the National Elephant Action Plan's implementation, it shall regular monitoring of the implementation is proposed, alongside the holding of an annual meeting between the Department of Forestry, Department of Forest Inspection, Department of Livestock and Fisheries and its stakeholders, including international organizations to discuss the management and conservation of wild and domesticated elephants and to assess the mitigation of human-elephant conflict. In addition, it should engage the community in resolving conflict issues and in the success of the action plan.

5.2.2. Evaluation

The Department of Forestry, the Department of Forest Inspection, the Department of Livestock and Fisheries and international organizations shall evaluate the implementation of the tasks and activities of the action plan, budget usage and the key coordination activities annually, during the first half of the term of the action plan and at the end-term of the plan with the participation of representatives from the Ministry of Foreign Affairs, related ministries, local authorities, provincial agriculture and forestry divisions and international organizations. Once the assessment is completed, the report will be submitted to the stakeholders within 30 days.

5.2.3. Reporting

The National Elephant Action Plan implementation committee shall submit the action plan implementation report and a financial report every six months, and an annual and project-ending report to the relevant sectors and international organizations that provide funding.

References

- Wildlife and Aquatic Law No. 07/NA, dated 24 December 2007
- Law on Forestry (Amendment) No. 64/NA, dated 13 June 2019
- Law on Livestock Production and Veterinary Matters (Amendment), No. 08/NA, dated 11 November 2016
- Decree on the Establishment of National Protected Areas No. 164/PM, dated 29 October 1993
- Prime Minister's Order on Strengthening the Strictness of the Management and Inspection of Prohibited Wild Fauna and Flora No. 05/PM, dated 8 May 2018
- Prime Minister's Decision on the Management of the List of Prohibited Aquatic and Wild Life No. 08/PM, dated 25 February 2021
- Ministerial Agreement on the Adoption and Promulgation of the Action Plan to Prevent and Combat the Aquatic and Wildlife Crimes of the Lao PDR from now to 2025 No. 0654/MoAF, dated 30 March 2018
- Ministerial Agreement on the Registration of Livestock, No. 1974/MoAF, dated 23 August 2012
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was signed on 23 March 1973, and amended on 22 June 1979
- Lao Statistics Bureau. 2019
- National Ivory Action Plan of the Ministry of Agriculture and Forestry No. 0863/MoAF, dated 9 June 2020
- McWilliam A, Hedges S, Johnson A, Luangyotha P. 2010. *A Manual for Human-Elephant Conflict Monitoring*.
- Asian Elephant Range States Meeting final report. 2017. Ministry of Environment and Forestry, Government of Indonesia
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- Duckworth J, Hedges S and WWF Indochina Programme. 1988. *Tracking Tigers: A review of the Status of Tiger, Asian Elephant, Gaur, and Banteng in Vietnam, Laos, Cambodia, and Yunnan (China), with Recommendations for Future Conservation Action*. WWF Indochina Programme, Hanoi, Vietnam
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- Khounboline, K. 2011. Current status of Asian Elephants in Lao PDR. *Gajah* 35:62-66.

Appendix

The implementation of the National Elephant Action Plan of the Lao PDR from 2022 to 2032 sets out tasks as follows:

Programmes and tasks	Responsible sectors	Indicators	Implementation	USD budget
Programme 1: Wild elephant habitat and food source protection programme				3,200,000
Task 1. Assess the status and habitats of elephants.	DOF, PAFO	The availability of information on the environment and habitat management plans.	Long term	200,000
Task 2. Assess potential threats and risks.	DOF, PAFO	Threat and risk data to be reported.	Long term	2,000,000
Task 3. Identify the wild elephant conservation areas and the corridor areas.	DOF, PAFO, WWF, WCS	The elephant habitats and corridor/contiguous areas are established.	Medium term	500,000
Task 4. Restore habitats and create food sources for wild elephants.	DOF, PAFO, WWF, WCS	The degraded areas have been restored, and elephant crops have been planted with water sources all year round.	Medium term	500,000
Programme 2: Human-elephant conflict (HEC) mitigation programme				2,200,000
Task 1. Collection of elephant migration/movement information and the human-elephant conflict (HEC) areas.	PAFO, DOF, WWF, WCS	Long-term human-elephant conflict information is available, and human-elephant conflicts have been reported.	Short term	200,000
Task 2. Develop a plan for prevention of human-elephant conflict	DOF, PAFO, WWF, WCS	Methods and plans for addressing the conflicts have been created and implemented; the human-elephant conflict solution guideline has been created.	Short term	1,000,000

Task 3. Addressing human-elephant conflict and compensating for damages.	DOF, PAFO, WCS, WWF	There are options for livelihood development, and some areas have planted crops that elephants do not like.	Long term	1,000,000
Programme 3: Illegal elephant killing and elephant-product trading prevention programme				400,000
Task 1. Prevent illegal elephant killing and elephant-product trade.	DOFI, POFI, WWF, WCS, Lao-WENT	The availability of information on elephant hunting, seizures and a study on the implementation.	Short term	200,000
Task 2. Create an information provider network and track illegal elephant killing and elephant-product trading.	DOFI, POFI, WWF, WCS, Lao-WENT	An information provider network has been created and data on monitoring and damage is reported.	Medium term	200,000
Programme 4: Law and regulatory implementation programme				1,000,000
Task 1. Assess the capacity of officers and authorities in the investigation and prosecution of offenders of elephant hunting and elephant parts/products trade.	DOFI, POFI, WWF, WCS, Lao-WENT	The number of officers trained, and the number of times investigations and prosecutions are reported.	Short term	100,000
Task 2. Enhance the ability of forestry officers to investigate and prosecute the illegal trade of elephants, parts and products from elephants.	DOFI, POFI, WWF, WCS, Lao-WENT	The number of times the law has been implemented, and there is a database on elephant products.	Short term	400,000
Task 3. Improve the coordination and collaboration of the Lao-WEN and P-WEN Coordinating Committees.	DOF, DOFI, POFI, WWF, WCS, Lao-WENT	Several reports on elephant habitat invasion and damages are created.	Short term	500,000
Programme 5: Staff capacity-building programme on wild and domesticated elephant management				3,500,000
Task 1. Monitoring wild elephant movement/migration by using GPS collaring.	DOF, WCS, WWF	Monitoring of elephant movement/migration is implemented.	Short term	500,000

Task 2. Study of the ecological system of elephants.	DOF, DLF, PAFO, WWF, WCS	Some studies, analyses and population reports on elephants have been created.	Short term	400,000
Task 3. Conduct surveys, collect data and evaluate the elephant populations every 5 years.	DOF, DLF, PAFO, WWF, WCS	The elephant population nationwide have been surveyed and reported every 5 years.	Short term	500,000
Task 4. Manage elephant habitats along the national borders.	DOF, DLF, PAFO, WWF, WCS	Some border management cooperation plans have been created.	Long term	200,000
Task 5. Register elephants, microchip domesticated elephants and monitor their movement .	DLF, PAFO	Domesticated elephants are monitored and managed.	Short term	200,000
Task 6. Create elephant rehabilitation, treatment, healthcare and propagation centres.	DOF, DLF, PAFO, WWF, WCS	Some elephant rehabilitation and propagation centres have been established.	Long term	1,500,000
Task 7. Establish and improve the mechanism for monitoring and inspecting the relocation and welfare of Lao elephants overseas.	DOF, DLF, PAFO, WWF, WCS	Monitoring and a number of inspections on the relocation, import-export and the welfare of Lao elephants overseas have been conducted.	Long term	200,000
Programme 6: Elephant conservation campaign and awareness creation programme				1,400,000
Task 1. Awareness creation campaign strategic plan on elephant management and conservation.	DOF, DLF, PAFO, WWF, WCS	Elephant conservation campaign posters/guidelines are created.	Short term	500,000
Task 2. Construct a team to implement the campaign and awareness creation on elephant conservation.	DOF, DLF, PAFO, WWF, WCS	The number of times campaigns have been implemented.	Medium term	700,000
Task 3. Increase cooperation and share development plans with investors in the elephant conservation areas and those in ecotourism.	DOF, DLF, PAFO, WWF, WCS	Participation and cooperation have increased.	Medium term	200,000

All budgets	11.700.000
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Total budget: \$ 11,700,000 (eleven million seven hundred thousand United States dollars).