



Republic of Gabon

National Elephant Action Plan



2018 - 2028

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SUMMARY

Unlike other countries within the forest biome that have suffered from civil strife and wars over the last 30 years, in Gabon political stability and low human density have helped to protect elephant populations. Although Gabon only has 13% of forests suitable for elephant habitat, Gabon's elephant population accounts for 52% of the total forest elephant population in Africa (Maisels *et al.*, 2013).

However, Gabon has also become the target of criminal groups, resulting in the rapid decline of its elephant populations. In the northeast of the country, it is estimated that since 2004 about 60-80% of the elephant population has been decimated for ivory (ANPN *et al.* 2013, Poulsen *et al.*, 2017).

The main challenges for long-term conservation of elephants in Gabon are the urgent safeguarding of those populations that have been most effected by the upsurge in poaching, the need to reconcile growing development with the needs of elephants and, gaining public support for elephant conservation.

The primary threats to elephants in Gabon are: 1) poaching for the illegal ivory trade; 2) human-elephant conflict resulting in loss of property, agricultural produce and human lives, which strongly undermines public support for elephant conservation; and 3) potentially in the long-term, loss of habitat and fragmentation resulting in loss of connectivity.

The goal of this national elephant action plan is to address these threats and challenges and to ensure that all aspects of elephant management, including political, social, economic and environmental concerns, are considered by all ministries and their partners in all their work plans, decisions and management measures.

A strategy was developed to achieve Gabon's long-term vision for its forest elephants. It defines a goal to be attained over a period of ten years (2018-2028). Eight key strategic objectives, aligned to the African Elephant Action Plan, must be carried out to achieve the goal. These objectives were identified through the analysis of threats to elephant conservation in Gabon. A series of concrete targets has been established for each of these objectives, as well as a list of actions and activities to be implemented to achieve them. These objectives are:

1. To address the current poaching crisis and illegal ivory trafficking, whereby the highest priority is to stop the decline of elephant populations in Gabon, with a zero tolerance for the illegal killing of elephants throughout the country and the dismantling of ivory trafficking networks. Concomitantly, wildlife laws need to be strengthened and penalties increased to deter potential wildlife offenders, while raising awareness with prosecution and the judiciary.
2. Restoration of viable populations will be promoted through habitat protection in priority conservation areas, larger than national parks, and connected by corridors. The legal recognition of these areas and their integration into the land-use planning process (PNAT – Plan National d’Affectation de la Territoire) will ensure the presence of human activities consistent with the maintenance of elephant-friendly habitat in these areas.
3. To address increasing human activity, which broadens the human-elephant interface, whereby it is crucial to develop and implement effective solutions to ensure sustainable cohabitation.

4. To address the lack of awareness of elephant conservation and their potential contribution to the economy with all key stakeholders. However, to be able to address some of the objectives outlined above, management needs to have sound information on population numbers, distribution, and movements, not only for spatial planning purposes, but also as feedback to regularly evaluate whether measures implemented have the desired effect.
5. To address gaps in the knowledge on Gabon's elephants.
6. To address the lack of communication and collaboration between Range, Transit and Market States. Lack of communication facilitates transnational wildlife crimes. Initiating channels of communication with neighboring range states will facilitate the establishment of a regional intelligence taskforce that will boost the capacity to investigate and prosecute transnational crimes.
7. To develop tourism to produce economic benefits from conservation for the country is a key factor for the long-term management of both human-elephant conflict and community collaboration in elephant conservation.
8. Finally, development of a management framework to effectively implement the Gabon Elephant Action Plan is addressed.

This integrated national strategy for the survival of forest elephant populations in Gabon is a comprehensive program that will be implemented by ANPN, under the authority of the Wildlife and Protected Areas Department (Direction Générale de la Faune et des Aires Protégées - DGFAP) of the Ministry of Water and Forests charged with Environment, and Sustainable Development (Ministère des Eaux et Forêts chargé de l'Environnement et du Développement durable - MEFEDD).

The Gabon Elephant Action Plan should be used to guide all strategies and decisions of relevant government institutions, including customs, transport, agriculture and justice, as well as all agencies responsible for law enforcement.

This strategy aims at stabilizing major elephant populations, improving protection and environmental law enforcement, defining conservation areas for elephants, reducing human-elephant conflict, promoting a positive image of elephants, and expanding the knowledge on forest elephants.

ACRONYMS

AEAP	African Elephant Action Plan
AED	African Elephant Database
ANPN	National Agency of National Parks
CCGL	Local Management Advisory Committee
CEEAC	Economic Community of Central African States
CITES	Convention on International Trade in Endangered Species
DEFRA	Department for Environment, Food and Rural Affairs
DFID	Department For International Development
DGDI	<i>Direction Générale de la Documentation et de l'Immigration</i>
DGFAP	<i>Direction Générale de la Faune et des Aires Protégées</i>
EIA	Environmental Impact Assessment
EPI	Elephant Protection Initiative
ETIS	Elephant Trade Information System
FAO	Food and Agriculture Organization
FSC	Forest Stewardship Council
HEC	Human-Elephant Conflict
ICCWC	International Consortium on Combating Wildlife Crime
IFAW	International Fund for Animal Welfare
IGAD	Institut Gabonais d'Aide au Développement
IUCN	International Union for the Conservation Of Nature
LAB	Lutte Anti-Braconnage (Fight Against Poaching)
MIKE	Monitoring Illegal Killing of Elephants
MPERNFM	<i>Ministère de la Protection de l'Environnement et des Ressources Naturelles, de la Forêt et de la Mer</i>
OIG	Organisation Inter-Gouvernementale
NEAP	National Elephant Action Plan
NIAP	National Ivory Action Plan
NGO	Non-Governmental Organization
ONUDDC	<i>Organisation des Nations Unies contre la Drogue et le Crime</i> (United Nations Office on Drugs and Crime)
PGES	<i>Plan de Gestion Environnementale et Sociale</i> (Environmental and Social Management Plan)
PNAT	<i>Plan National d'Affectation des Terres</i> (National Land Use Plan)
SETRAG	Société d'Exploitation du TRAnsGabonais (Transgabon Rail Company)
SMART	Spatial Monitoring And Reporting Tool
UHE	Unité Homme-Eléphants (Human-Elephant Unit)
USE	Unité Spéciale Eléphants Special Elephant Unit
WCS	Wildlife Conservation Society

1. INTRODUCTION

The forest elephant population in Central Africa, which numbered between 500,000 and 1,000,000 pre-1980s, fell to around 100,000 by 2011, while their habitat has been considerably reduced to 25% of its potential range (Maisels *et al.*, 2013). Gabon is today one of the last bastions for forest elephants, which have a quasi-continuous distribution throughout its territory. Thus, although Gabon only has 13% of forests, Gabon's elephant population in 2011 accounted for 52% of the total forest elephant population in Africa (Maisels *et al.*, 2013). Political stability and low human density as well as the country's commitment to conservation over the last 15 years, have helped to protect elephant populations, unlike other countries within the elephant range that have suffered from civil strife and wars over the last 30 years.

However, following the 2006 decision by CITES to authorize a one-off ivory sale, Gabon became the target of criminal groups, resulting in the rapid decline of some of its elephant populations. In the Minkébé region in the North-East of the country, the situation is particularly critical. It is estimated that since 2004, about 60-80% of this elephant population was decimated for ivory (ANPN *et al.* 2013, Poulsen *et al.*, 2017). While the increase in demand for ivory has led to a sharp rise in prices, poaching and ivory trafficking, linked to illegal gold mining, have become activities organized by international criminal networks run by corrupt military officials and West African nationals. Gabon was identified as one of the leading source countries of illegal ivory in Africa (Wasser *et al.*, 2015), specifically from the TRIDOM area, where the Gabon sector is the Minkebe area. A strong response is crucial to put a stop to poaching, trafficking and the demand for ivory.

Gabon's strong commitment to conservation led to the creation of 13 national parks in 2007 and the establishment of a management body, the National Agency for National Parks (ANPN). ANPN rapidly increased in capacity from 2010 onwards, when the government significantly increased its financial resources. In Minkébé, the armed forces have been permanently involved in national park security since 2011, when they assisted ANPN to close an illegal gold camp that had grown to almost 7,000 people, including over 6,000 illegal immigrants.

In June 2012, Gabon was the first country to burn its entire ivory stock pile. The accession of Gabon to several international conventions and the adoption by the United Nations of the first anti-poaching and illegal wildlife trafficking resolution in July 2015, which resulted from a joint initiative with Germany, showed that Gabon continues to play a leading role in elephant conservation.

The main challenges for long-term conservation of elephants in Gabon are the urgent safeguarding of those populations that have been most effected by the upsurge in poaching, the need to reconcile growing development with the needs of elephants and gaining public support for elephant conservation.

1.1 GABON'S NATIONAL ELEPHANT ACTION PLAN OBJECTIVES

The goal of a national elephant conservation strategy is to ensure that all aspects of elephant management, including political, social, economic and environmental concerns, are considered by all ministries and their partners in all their work plans, decisions and management measures.

The purpose of this strategic governmental document, named National Elephant Action Plan (NEAP) is to:

- Implement the measures outlined in the African Elephant Action Plan (AEAP) for Gabon;
- Provide a framework for the long-term conservation of forest elephants in Gabon, identifying key goals to be achieved within ten years;
- Provide a framework and guidance for all ministries and their partners undertaking work related to forest management, land use and other activities likely to impact elephant populations;
- Develop concrete priority projects to ensure financing.

1.2 NEAP DEVELOPMENT PROCESS

This document was developed through a consultation process. It benefitted from existing reports and documents, including:

- An elephant conservation strategy in Central Africa was developed by the countries concerned in 2005, with support from the IUCN African Elephant Specialist Group (AfESG 2005);
- A national human-wildlife conflict management strategy was developed in 2010 and revised in 2012 and in 2016;
- In 2011, WCS Gabon prepared a document (WCS Gabon, 2011) for the then Wildlife and Hunting Department (Direction de la Faune et de la Chasse - DFC), which identified four main courses of action
 1. Develop an intelligence system on ivory trafficking in Gabon;
 2. improve the application of legal procedures in cases of poaching and ivory trafficking;
 3. establish an inter-agency rapid response force for anti-poaching;
 4. integrate elephant conservation needs into land-use planning strategies.
- At the request of CITES (SC65 Doc.42.1) Gabon submitted its National Action Plan for Ivory (PANI) at the end of 2014, covering the 2015-2016 period (DGFAP and ANPN 2014). The development of this national strategy is consistent with the commitments made by Gabon at the international level. It revolves around several cornerstones in the fight against poaching and ivory trafficking:
 1. a reform of the relevant legislation and a strengthening of legal proceedings,
 2. an intelligence system and effective investigations,
 3. the establishment of national and international collaboration,
 4. the multiplication of operations in the field and key player awareness.
- In December 2013, a series of 14 urgent measures for elephant conservation was adopted at the African Elephant Summit in Gaborone.
- Gabon is one of the four founding countries of the Elephant Protection Initiative (EPI) and among the signatories of the Declaration on the Illegal Wildlife Trade, launched in 2014 at the London Illegal Wildlife Trade Conference.
- Finally, to renew Gabon's previous commitments and strengthen the immediate protection of Minkébé's elephants, in January 2015, the President signed up to the 'Giants' Club', launched with the presidents of Botswana, Kenya and Uganda.

2. IMPLEMENTATION OF THE NEAP

The NEAP is a government strategy developed by the ANPN and the DGFAP, who will ensure the coordination and follow-up necessary for its implementation. It is a tool for planning conservation measures, to serve as a framework for the strategies and decision-making of all government institutions, including customs, transport, extractive industries, agriculture and law enforcement. This tool is also to serve as a reference for NGOs, INGOs and donors to implement actions consistent with the NEAP and the priorities defined by the Gabonese Government. Moreover, the NEAP will provide the necessary strategic framework for the coordination of all actors involved in elephant conservation and management, including government institutions, NGOs/INGOs, private sector partners and local communities. The purpose of this coordination is not to restrict elephant protection initiatives, but to increase their effectiveness by facilitating cooperation and information exchange in order to better target activities. It is not a static document and its strategy will evolve with new threats, new challenges and new opportunities. The mechanism for the implementation of the NEAP is as follows:

- 1) Appointment of a NEAP coordinator/ coordinating committee
- 2) Formulation of annual work plans during workshops involving different partners
- 3) Fundraising for the implementation of priority activities
- 4) Monitoring the implementation of priority activities
- 5) Communication.

3. STATUS AND IMPORTANCE OF ELEPHANTS IN GABON

The elephants of Gabon are forest elephants. Despite obvious morphological, ecological, and behavioral differences with savannah elephants (Grubb *et al.*, 2000, Schuttler *et al.*, 2014, Blake *et al.*, 2009), forest elephants are still officially recognized as an African elephant subspecies (*Loxodonta africana cyclotis*). Genetic evidence strongly supports the hypothesis of the existence of two distinct species (Roca *et al.*, 2001, Rohland *et al.*, 2010, Ishida *et al.*, 2011, Mondol *et al.* 2015, Roca *et al.* 2015), but the taxonomy of African elephants has not yet been officially modified (IUCN 2003). **Gabon considers its population to be a separate species, the African Forest Elephant, *Loxodonta cyclotis*.**

Forest elephants are less known compared to the savannah elephant. Their range covers the dense forests of the Congo - Ogooué Basin, with some fragmented populations in West Africa.

Central African forests account for 23% of elephant range in Africa and are now the largest continuous habitat blocks (Blake *et al.*, 2007). However, between 2002 and 2011, the occupancy by elephants of this habitat was reduced by 30%, while the size of the population dropped by 62% (Maisels *et al.*, 2013). Gabon is now the last bastion for the conservation of the forest elephant. Indeed, although the area of the country represents only 13% of Central Africa's total forest habitat, Gabon is the only country still hosting a near-continuous distribution of elephants, with a network of protected areas that covers approximately 21% of the country (Fig. 1). It is estimated that it is home to half of the total population of forest elephants in Africa.

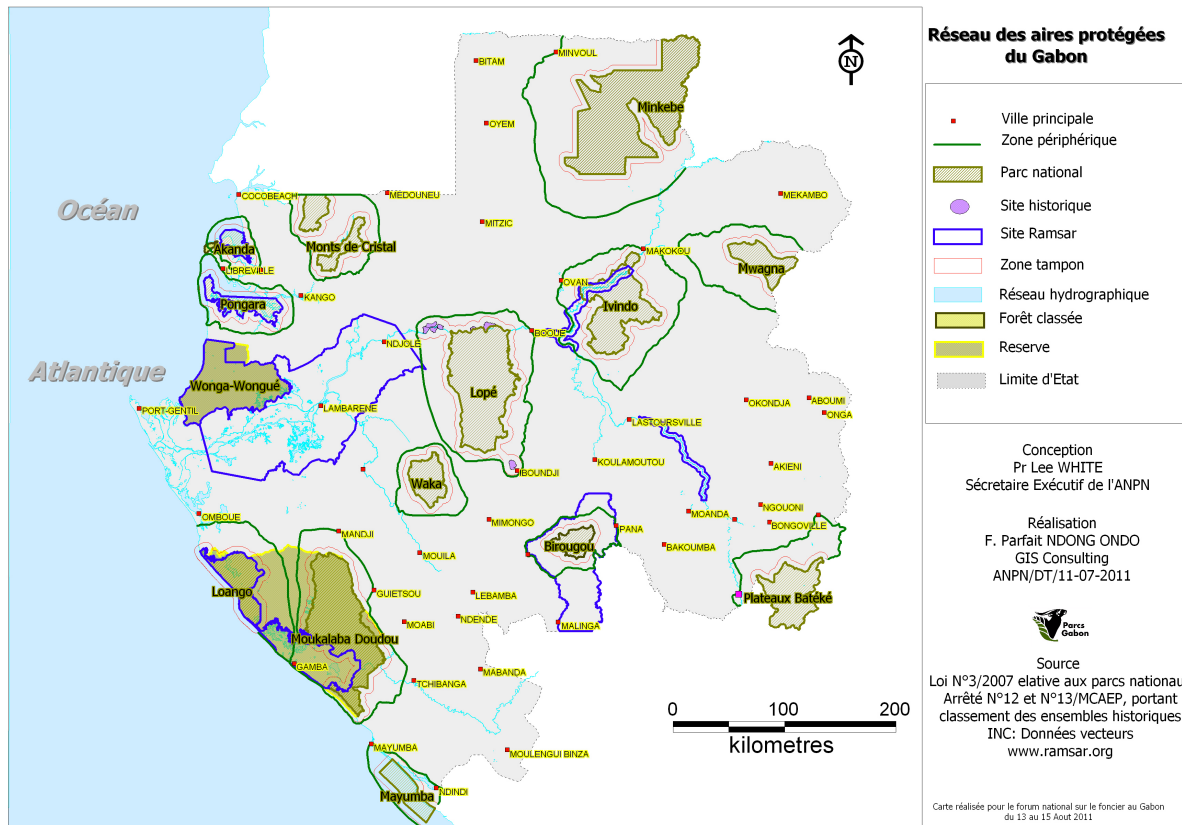


Fig. 1: The protected area estate of Gabon: National Parks, their buffer zones and peripheral areas, RAMSAR sites, classified forests and wildlife reserves.

However, even in Gabon, high population densities (more than 0.6 individuals/km²) were recorded in only 14% of the forest of the country (Maisels *et al.*, 2013). It is estimated that 44% of the national population of elephants resides in the national parks, wildlife reserves and RAMSAR sites (combined), with 6% in the buffer zones situated in a band of 5 km from the national parks (Table 1). Concessions certified by the Forest Stewardship Council (FSC) (more protected than non-FSC certified concessions) are also home to a significant number of elephants, roughly 17% of the total population (Table 1).

Table 1: Percent of Gabon's elephant population within different land-use types (These are non-additive as there is a great deal of overlap).

Land use type	Percent of Gabon's elephants
National Parks plus Wonga Wongue	35%
Buffer zones of National Parks	6%
Reserves de Faune	3%
RAMSAR sites	8%

RAMSAR sites not in Faunal Reserves, National Parks or in Wonga-Wongue	6%
All logging concessions	48%
FSC-certified concessions only	17%

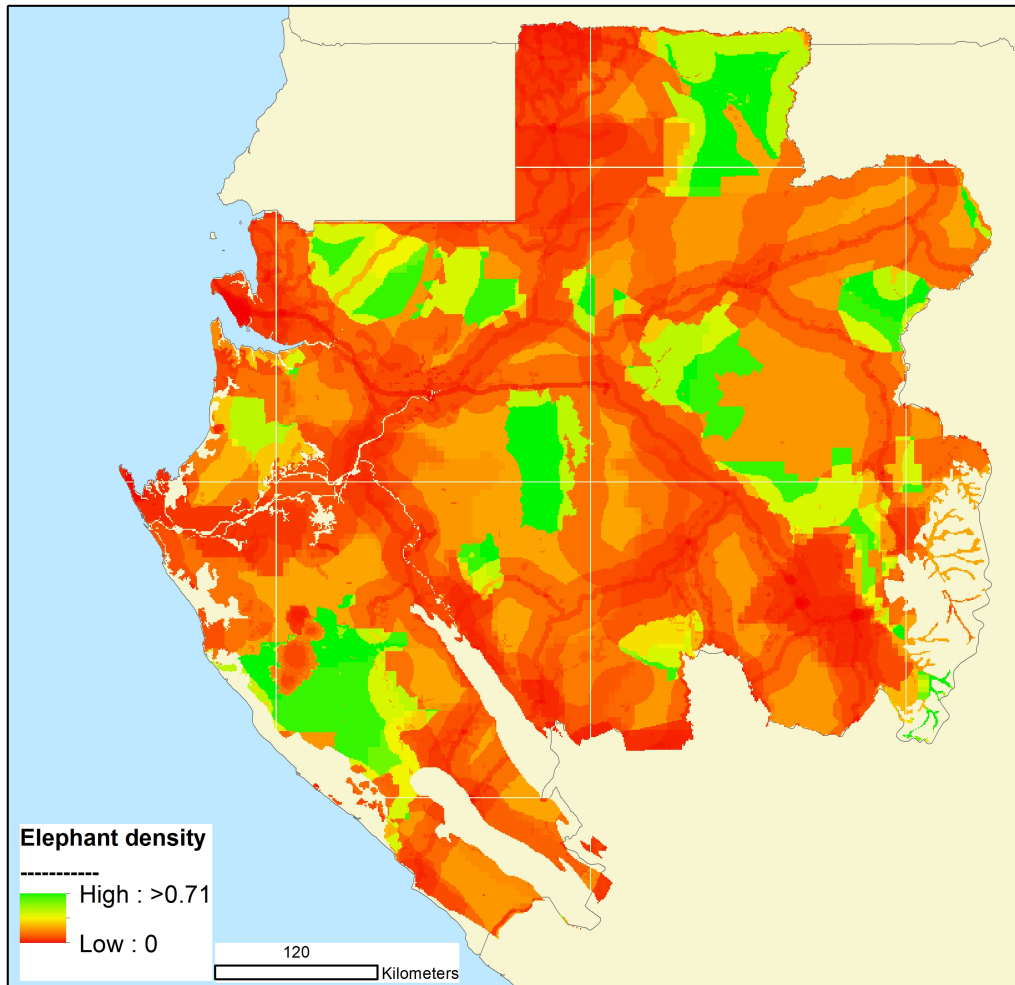


Figure 2: A model of elephant distribution in Gabon in 2011, showing density thresholds (Maisels *et al.* 2013). Overall density declined by 9% per year from 2002 to 2013 and likely continues to do so. Thus the high density threshold is likely lower than 0.7 in 2018.

Elephants play several important roles in Gabon:

1) Ecology: The African forest elephant is frugivorous (White *et al.*, 1993, White 1994, Blake *et al.*, 2009, Turkalo & Barnes 2013) and play a major role as ecosystem engineers (Terborgh *et al.* 2016) in the second largest tropical forests on earth, and thus are partially responsible for carbon sequestration, (Blake *et al.*, 2009, Lewis *et al.* 2009, Campos-Arceiz and Blake, 2011, Dargie *et al.* 2017). Elephants move rapidly over comparatively large distances (Blake *et al.*,

2008, Kolowski *et al.*, 2010, Schuttler *et al.*, 2012) and can thus disseminate vast quantities of seeds kilometers from the mother tree (Blake *et al.*, 2009).

They eat the fruits and disperse the seeds of a large number of fruit tree species, and act as primary dispersers for one, or sometimes several species, some of which have economic value (eg *Bailonella toxisperma* (Moabi), *Detarium macrocarpum* (Alen), *Gambeya africana* (Longhi), *Irvingia gabonensis* (Andok), *Klainedoxa gabonensis* (Eveuss), *Mammea africana* (Oboto), *Tieghemella africana* (Douka)) (White *et al.*, 1993, Morgan and Lee, 2007, White and Abernethy, 1996), so elephants are essential for the preservation of forest structure and diversity. A study showed a change in tree communities only a decade after the disappearance of elephants from the ecosystem (Beaune *et al.*, 2013).

Elephants are also responsible for the maintenance and perhaps even creation (Turkalo and Fay 1995, Turkalo and Barnes 2013) of mineral-rich forest glades on which a large variety of animals in the forests of Africa depend (Klaus *et al.*, 1998, Turkalo and fay 2001).

Finally, recent studies show that elephants and other animals traveling long distances are essential for the lateral transport of important soil nutrients away from river and mountain areas and that their disappearance in some areas would have influenced the displacement of millions of people from nutrient-poor foothills to valleys (Doughty *et al.*, 2013a,b, 2016, Wolf *et al.* 2013). Elephants may also be responsible for the replenishment of soil nutrients throughout the forests of Central Africa: understanding these functions is of crucial importance, especially as rural communities in the region depend on small slash-and-burn systems (Abernethy *et al.* 2016, Atyi *et al.*, 2008).

2) Tourism: Although wildlife, and elephants in particular, are not currently a major economic asset for Gabon, there is a political will to make wildlife-oriented tourism one of the future pillars of the country's economy ([http:// www.gabon-vert.com](http://www.gabon-vert.com) / White *et al.*, 2011), as is the case in many East African countries. In areas where ecotourism is well developed in Africa, the value of a living elephant is more than 70 times higher than that of a dead elephant, in terms of benefits to the country, relative to the gross value of its ivory (Iworry, 2014), and indeed, the continental loss of tourism income to African nations caused by elephant poaching has been valued at \$25 million annually (Naidoo *et al.* 2016).

When comparing the value of ivory for poachers and that of the animal for ecotourism, an unofficial calculation based on the value of a large adult male in Ivindo showed that each male reached the value of US\$300,000 over a period of twenty years. The value of the same animal's ivory is much lower, only brings in money once and is never intended for the national treasury, but benefits the criminal networks. Moreover, if tourists have an enjoyable stay in the country, this improves the international image of Gabon, thus attracting more visitors and producing more added value for the country's tourism and transport infrastructures (White *et al.*, 2011).

3) Cultural significance: Elephants have great cultural significance throughout Africa. Several football teams bear their name (Guinea and Ivory Coast) and elephants are the national emblem of several countries (Ivory Coast, Kenya, and Mozambique). They are one of the few representative species found in most African countries, and countless stories, songs, and cultural traditions mention elephants. In Gabon many believe that strong men are able to transform themselves into elephants. The human and natural worlds are inextricably linked

through myths, rites and legends. Homonymy, which means that the local word for elephant is given both as surname and totem to a child, is a good example of the close human-animal relationship in Gabon. The elephant is also a totem for some of the clans. This totem is associated with a ban to hunt or kill elephants, with severe consequences if it is transgressed, due to the traditional perception of regarding themselves and the natural world around them as unity (Moukagni 2018).

4. PRIMARY THREATS TO ELEPHANT POPULATIONS IN GABON

The world's elephant populations are under threat and Gabon's elephants are no exception. Recent work has shown that forest elephants reproduce much more slowly than savanna elephants (Turkalo *et al.* 2017). The age of an average forest elephant female when she gives birth for the first time is 23: almost double that of an average savannah elephant, and the calving interval is 5.5 years, which is about 1.4 times longer than for savannah elephants. This means that forest elephants are even more vulnerable to poaching than previously thought: it takes even longer for their populations to recover after a decline. Poaching, too, alters the social and behavioral patterns of forest elephants, and can have severe ecological consequences (Beaune *et al.* 2013; Breuer *et al.* 2016).

A threat analysis was conducted to identify the factors contributing to population decline and its relative importance in different regions of Gabon (4.1 to 4.4).

4.1 POACHING AND ILLEGAL IVORY TRADE

The sharp rise in the price and demand for ivory in Asia has led to an increase in elephant poaching in Africa (Wittemyer *et al.*, 2011, CITES 2016a, b), which reached levels incompatible with species survival (Wittemyer *et al.* 2014). Wildlife trafficking is now ranked 4th in the world for illicit trafficking (Nellemann *et al.* 2016; UNODC 2016, 2017). Ivory trafficking involves highly organized international trafficking networks, often associated with weapons and drugs trafficking and terrorist organizations (IFAW 2013). Even before the publication of the decline of over 60% (2002-2011), the Central African forest elephant subpopulation was already listed by IUCN as Endangered (Blanc 2008). Northeastern Gabon and areas adjacent to Congo and Cameroon are one of Africa's top two sources of raw ivory (Wasser *et al.*, 2015). In fact, between 2004 and 2014 an estimated loss of 25,000 elephants was recorded in Minkébé National Park and surrounding areas (ANPN *et al.* 2013; Poulsen *et al.*, 2017).

Like any other contraband, ivory trafficking is coordinated and organized, with national intermediaries operating in international networks (Wittig 2016). Most of the elephant poachers are professional hunters, foreign (Cameroonian, Nigerian, Tchadian, Malian) and Gabonese. Elephants are mostly killed with semi-automatic weapons and high caliber rifles; the possession of which is illegal. Controlling poaching in extended forest areas such as Minkébé National Park (7,570 km²) is extremely difficult. Rangers patrol large and poorly accessible areas on foot and staff numbers are currently not sufficient to cover the entire area at frequent intervals.

Artisanal gold panning, often associated with elephant poaching, also attracts many foreigners illegally entering via the Northern border. Organized bands are crossing from Cameroun, where the porters will mine for gold whilst the hunters kill elephants. **It is estimated that the illegal trade in ivory accounts for \$15 million annually whilst the figure for gold may be as high as \$40 million.**

Since 2015, a significant change in behavior has been observed among foreign poachers, who no longer hesitate to shoot at patrol staff. Some of the ivory (probably around 20%) is illegally exported from the airports and ports of the capital, where two record seizures of nearly 200 kg of ivory were made in 2015 and 2016. However, around 80% of the poached ivory is exported through forest trails, rivers and road networks to Cameroon (Nkoke *et al.* 2017).

In addition, some seized ivory stocks regularly re-enter the illegal trafficking channels.

Commitment to the fight against poaching and ivory trafficking has resulted in an increase in the budget allocated to the ANPN, a rapid increase in the number of patrol staff and patrols, and a series of measures to strengthen actions against poaching and ivory trafficking. The armed forces have been present in Minkébé National Park since 2011, resulting in the eviction of over 6,000 illegal gold miners, whilst an ANPN gendarme unit (army police) has been established to conduct joint patrols with rangers throughout the national parks.

Concurrently, the American and British armies are supporting field officers training.

In 2013, an ivory detector dog unit (sniffer dogs) was set up to monitor potential ivory export points.

Also, in 2013, a national inventory audit (Ringuet 2012) produced recommendations on the management of seized ivory (Ringuet and Lagrot 2013).

To monitor illegal activities in protected areas, a monitoring, data collection and management system (MIST, later replaced by SMART) has been used since 2008 and a new system is currently being developed. Moreover, following the implementation of the toolkit created by the ICCWC for the analysis of wildlife and forest crime in 2014 (UNODC 2012, 2014), the ANPN initiated capacity building for the collection and management of data related to wildlife crime. A special investigative unit was established to infiltrate and arrest organized criminal networks trafficking in wildlife.

Since 2015, efforts have been made to safeguard the seized national ivory stock and set up a transparent management system. A genetic database of elephants in Gabon has been initiated to reinforce the traceability of seized ivory and thus better understand the sources and main channels of the traffic.

However, these efforts must continue. The ANPN workforce needs to be doubled, equipment and infrastructure strengthened, to ensure a permanent presence in the national parks and to carry out an effective strategy against the organized poaching networks. Despite significant efforts invested in the training of patrol staff and gendarmes, continued training must be strengthened to reach a level of competence required for anti-poaching missions in the forest. Since the implementation of the Spatial Monitoring and Reporting Tool (SMART), information has started to be used for the development of an adaptive anti-poaching strategy at the national

level. Moreover, elephant population studies (density, seasonal movements) are needed to monitor poaching and trafficking levels and guide conservation activities.

Outside national parks, the DGFAP's (Fauna and Protected Areas Department) capacity for action is very limited in remote areas, where elephants are killed with impunity. Some logging concessions are implementing surveillance measures and the SMART monitoring system, but the means for protecting previously exploited areas, made more accessible by road opening, are largely inadequate. That said, the national parks agency is currently transitioning into the nature preservation agency (Agence Nationale de Préservation de la Nature – ANPN) with a mandate to work nationally. ANPN is already gearing up its activities in priority elephant areas outside the national parks.

When acting against ivory trafficking networks at the national level, a reliable intelligence system, supported by close collaboration between the different institutions is crucial. Significant steps have been taken recently to improve data availability and to establish a reliable communication network. In addition, a special rapid intervention unit to implement investigations, busts and arrests has been established.

The institutions in charge of wildlife (ANPN, DGFAP) cannot fight alone against organized wildlife crime. The involvement of the police and the gendarmerie in wildlife trafficking investigations has recently been strengthened by the creation of an elite multi-agency mixed unit including ANPN, Police, Gendarmerie, Customs and the Prosecutors office.

That said, there is a need for training in new techniques for investigating and collecting evidence on wildlife crime scenes and it must be noted that basic forensic capabilities (ballistics, fingerprints) are still limited in Gabon.

Finally, international collaboration in investigations and prosecutions, particularly with border countries, but also with transit countries and countries importing ivory, are essential for the fight against organized international trafficking. Joint patrol programs with Cameroon and Congo have been initiated but remain underdeveloped.

4.2 RESTRICTION OF HABITAT AND POPULATION FRAGMENTATION

Central African forests contain the largest continuous blocks of elephant habitat on the African continent (Blake 2007, 2008). Gabon is the last country with a nearly continuous elephant population occupying an area that is for 88% covered by forests, but it is facing a rapid expansion of extractive industries (oil, forestry and mining). Agricultural development (oil palms, rubber trees, subsistence agriculture) is a government priority. Unlogged areas have become rare (Blake 2008), but human activities have varying levels of impact on the integrity of elephant habitat. While agriculture breeds deforestation and feeds human-elephant conflict, logging, based on selective felling, produces secondary forests that attract elephants (Clark *et al.*, 2009, Poulsen *et al.*, 2011). However, national roads network development comes with goods transportation and urbanization, while the exploitation of resources produces a network of secondary roads giving access to remote areas. Human presence, including roads, human infrastructure, noise, hunting pressure, has a strong negative impact on elephant presence and fragments their habitat (Fay and Agnagna 1991, Laurance *et al.*, 2006, Buij *et al.*, 2007, Blake *et*

al., 2007, Blake *et al.*, 2008, Clark *et al.*, 2009). Given the distribution of human impacts, connectivity has probably been reduced or even lost between some national parks, as noted in a report published in 2012 (Maisels and Strindberg 2012).

In 2002, to protect its biodiversity and its habitats, Gabon announced and provisionally created a network of 13 national parks, which represent 11% of its territory. The law finalizing the creation of the National Parks was passed in 2007. In addition, a network of wildlife reserves and RAMSAR sites protect a further 10% of terrestrial habitats.

The country has also embarked on a land-use planning process to reconcile the needs of the different sectors involved in land use (oil, mining, forestry, agriculture, fisheries, transport, hydropower, urbanization, and defense) but also conservation. The land use plan describes, for each sector, the current land use situation, as well as the “priority spatial zones”, i.e. the priority areas where the sector is likely to carry out its activities in future. In addition, ANPN has worked with the National Council for Land-use Planning (CNAT) to develop a methodology to allocate agricultural concessions for oil palm in areas with low conservation and carbon value, thereby avoiding conflicts between agricultural development and conservation priorities.

Nevertheless, national park size (between 540 and 7,570 km² per park) is not always sufficient to contain viable elephant populations and allow their movement and dispersal. The home range of forest elephants is organized around a network of key areas (rivers, wetlands, fruit trees and baïs) (Blake and Inkamba-Nkulu, 2004; Clark *et al.*, 2009) and may extend outside the boundaries of the protected areas (Momont, 2007; Blake *et al.*, 2008).

Outside protected areas, forestry concessions, if well managed, can also contribute to elephant conservation. Extractive industries, in particular logging companies, are legally obliged to propose a management plan, which must be validated by the forest administration, as well as an Environmental Impact Assessment (EIA) and an Environmental and Social Management plan (PGSE), which includes wildlife management measures.

ANPN started an elephant GPS collaring program in October 2015. Preliminary data show that roughly half of the collared individuals regularly cross the boundaries of national parks (Figure 3). Home ranges (Minimum Convex Polygon 100%) of females vary between 81 and 1,181 km² (mean= 306 km², n=30 individuals) and are relatively stable across years. Adult males use larger areas (home ranges between 140 and 1,677 km², mean=682 km², n=26 individuals) and their movements may take them far outside national parks. Maximum observed range length for males (distance between the farthest locations within a home range) was nearly 85 km. High inter-individual variations in male space use are likely linked to their age and reproductive status, as males are the dispersing sex in elephants.

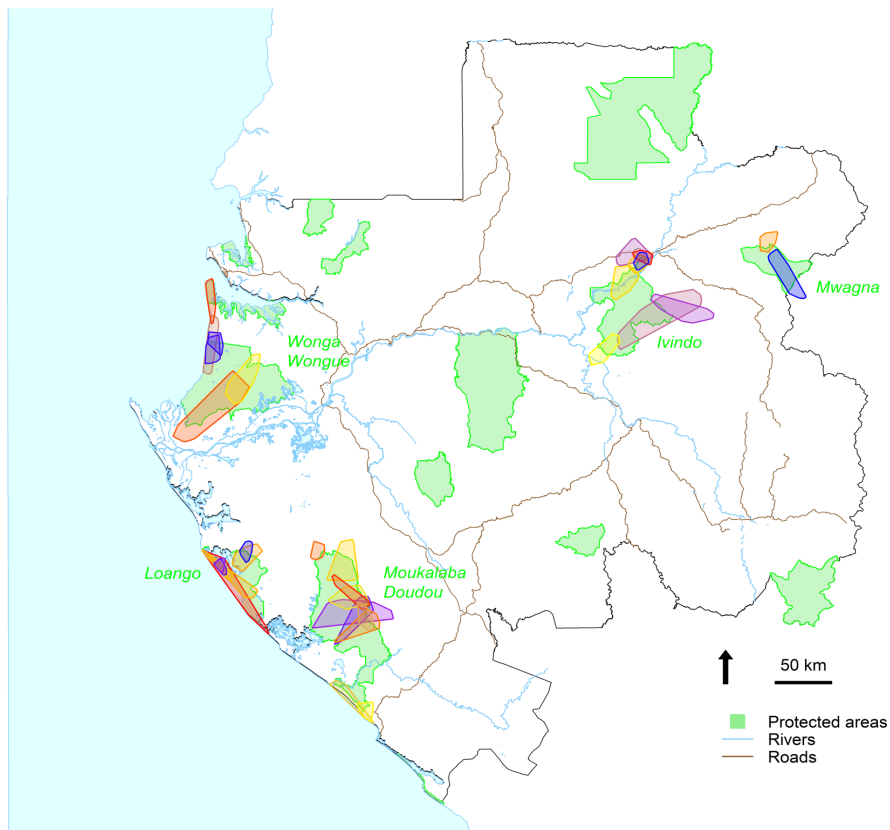


Figure 3: Spatial distribution of home ranges overlapping the boundaries of national parks.

Available telemetry data that includes older information for Loango, Ivinda and Lopé National Parks (Schuttler *et al.* 2012) (Figure 4) suggests that forest elephants have stable home ranges and do not migrate seasonally, contrary to savannah elephants (Purdon *et al.* 2018). There was no evidence of individuals moving between parks. However, genetic connectivity is high across the forest elephant range (Johnson 2008, Ishida *et al.* 2018), suggesting that gene flow occurs continuously over generations across continuous populations. Although some of the males may travel between parks and other protected areas, especially during dispersal events, the female groups – that is the bulk of the local populations – may cross park boundaries but never stray too far, implying that connectivity between the main elephant populations occupying priority areas (national parks) is therefore reliant on those populations that use areas with a lower protection status located in between these priority areas.

Studies underway using camera traps will document key corridors. In addition, ANPN has started an extensive study of forest elephant genetics since 2014, including the development of new genetic markers (Bourgeois *et al.* 2018) and a national laboratory to analyse samples that will provide further information on fine-scale genetic connectivity.

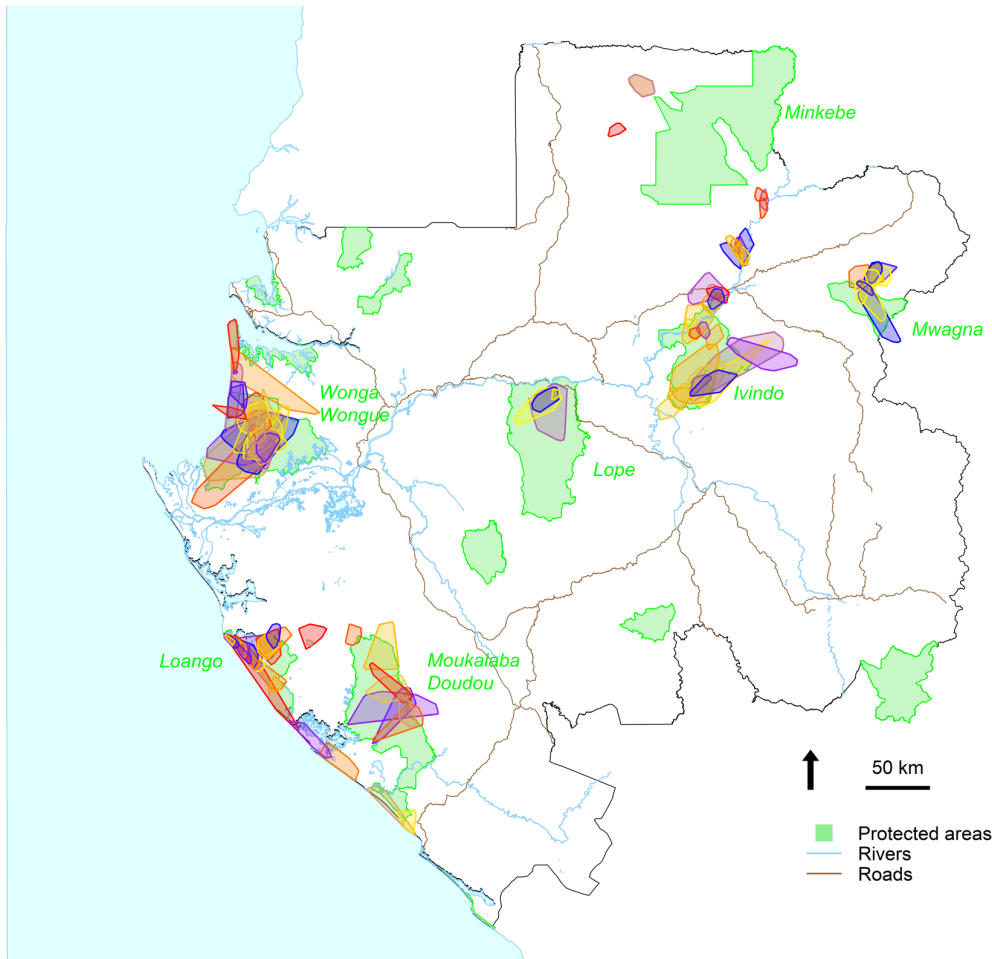


Figure 4: Distribution of home range sizes (MCP 100%), within and between protected areas, for 69 forest elephants in Gabon.

A land-use planning exercise was simulated to outline the areas needed to maintain the thresholds of 70, 80 and 90% of the country's current elephant population (WCS 2013). This is a first step towards identifying priority areas for elephant conservation (Figure 5). Maintaining connectivity between these priority areas, i.e. genetic exchanges ensured by male dispersal for breeding, is crucial to ensure the long-term viability of forest elephants. However, this map needs to be updated with more recent data on elephant densities at a nationwide level, current movement studies, and genetic mapping. A nationwide evaluation of elephant densities is currently being undertaken by ANPN, WCS and Vulcan with results expected in 2020. The combined information of these studies underway will eventually lead to the demarcation of key corridors.

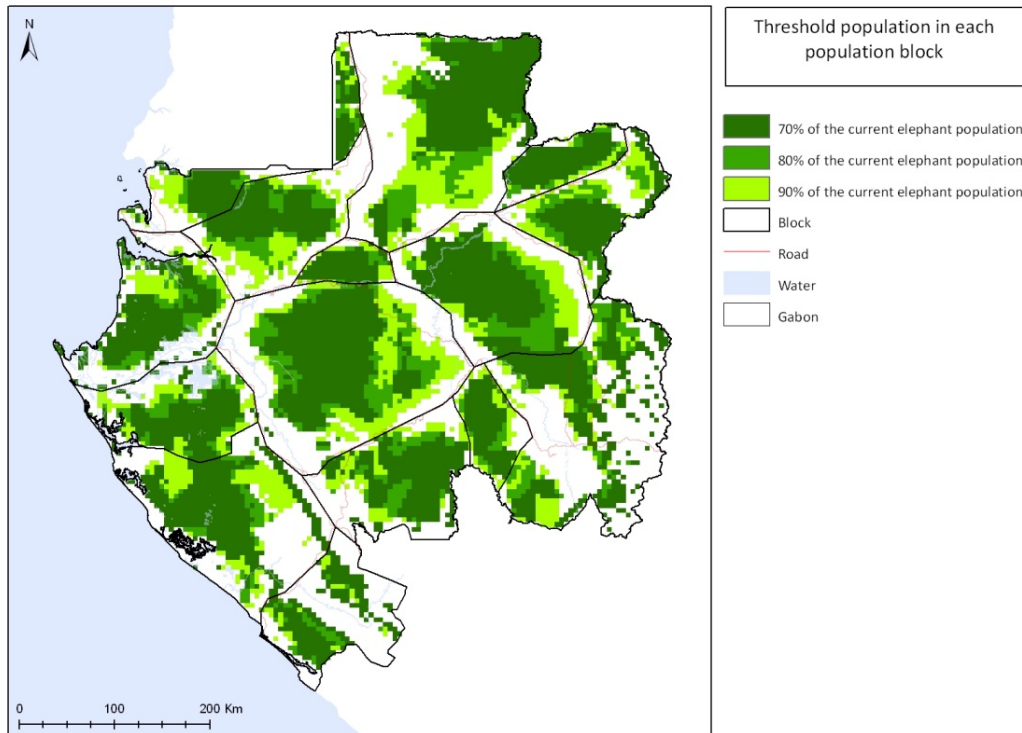


Figure 5: Results of threshold elephant population modeling in each forest block (source: WCS 2013).

4.3 HUMAN ELEPHANT CONFLICT

With only 25% of food resources produced locally, agricultural development has become a priority in Gabon and includes support for rural and village agriculture and the development of intensive industrial crops (oil palm, rubber trees). There is a perception that elephants are increasingly destroying crops. Major changes in land use over the past century (village clustering, rapid expansion of extractive industries - especially forestry, agricultural development, exponential poaching pressure, road development) have led to profound changes in the habitat and the distribution of elephants. Large forest blocks are no longer refuges for elephants, which may be driven by commercial poaching in remote forests to move closer to local communities, where paradoxically they are safer.

Elephant hunting was banned in Gabon in 1981 and crop devastation by elephants has been identified as a major problem in the country since the 1980s (Lahm 1996). Several studies have assessed the extent of crop damage using questionnaires (Lahm 1996, Walker 2010) and field observations (Fairet 2012). The damage caused by elephants is seasonal and varies locally. The crop scattering, their remoteness from villages, their proximity to forest areas - especially key attraction points for elephants (swamps, fruit trees), and their lack of protection are major risk factors. Surveys conducted in 1993-1994 showed that little effort was being made by villagers to protect their fields. The majority used traps (38%), 23% tried to erect barriers, while only 11% camped in their fields (Lahm 1996). Rural exodus worsens the lack of young labor and of crop protection.

Elephant damage is less common than rodent damage, but it is sometimes more significant (Lahm 1996, Fairet 2012). Elephants can destroy an entire field in one visit. Loss of income and

food resources can be dramatic for villagers, particularly because of the low productivity of village crops and the annual planting rate. Human-Elephant conflict (HEC) leads to negative and even hostile attitudes, posing a threat to conservation. Cases of human mortality are rare but exacerbate conflicts. Crop destruction regularly results in retaliation in the form of elephant killings. Thus, 15 cases of killing were reported to the authorities in 2014-2015, but the actual mortality is largely underestimated; villagers are also illegally using professional hunters and setting traps (using cable or nails).

In cases of crop devastation by elephants, the Gabonese Forest Code allows the killing of the animal responsible for the damage by official crop control officers (Articles 196 and 201) and recognizes self-defense (Article 172). A financial compensation procedure to be paid for deliberate crop destruction is provided for by a 2011 Decree (No. 1016 / PR / MAEPDR), but it does not refer to crop destruction by animals.

The Gabonese government's growing concern for the resolution of human-wildlife conflicts has resulted in a series of workshops since 2010. These workshops proposed a national strategy for human-wildlife conflict management (currently under revision) and developed a toolkit for the assessment and mitigation of these conflicts with the support of the FAO.

The FAO toolkit offers multiple potential mitigation methods, but only a few have been tested (Ngama *et al.*, 2016), thus knowledge of their potential effectiveness is limited. Moreover, standardized scientific data is insufficient to measure the extent of HEC, actual crop depredation by elephants at the national level and to understand its mechanisms. Government officials are not properly trained in elephant damage assessment, proposed mitigation methods, and especially conflict management with villagers.

Nevertheless, the legal provisions are weak for HEC management. The effectiveness of selective culling, even if it temporarily relieves tension, is very limited because of the risk of misidentification of the animal responsible for the damage and of the high probability that it will be immediately replaced by another elephant (Chiyo *et al.*, 2011). Experience has shown in a number of countries that government compensation systems are expensive and inefficient (staff costs, limited means of control, corruption) (Hoare 2012). Furthermore, cumbersome administrative procedures and government officials' lack of means for making the reports are obstacles to their application. These institutional measures are not a viable solution for HEC because they do not directly address the root of the problem.

In 2016 the Government instructed ANPN to create a special unit to manage HEC. ANPN established a team with the capacity to control problem elephants and travelled to Kenya to assess methods used in the Laikipia area, where there is 30 years of experience dealing with HEC. ANPN concluded that the only viable method in the medium-term is well designed, well maintained electric fences (and to a lesser extent strap fences that have proven to be very effective, adapted to crop rotation and well-received by local communities). A program was initiated to test electric fences in Gabon and to date 6 fences have been constructed and a further 10 are in the planning or early construction phases. ANPN plans to establish 250 fences over the next 5 years.

Finally, tourism is only just starting to develop in Gabon so local populations do not benefit from national park economic rewards to compensate for the negative impacts of cohabiting with

elephants. Local people, especially through CCGLs (local advisory committees), are only beginning to reap benefits, but are not yet sufficiently involved in HEC management.

4.4 LEGAL AND INSTITUTIONAL CHALLENGES

If demand, price and availability of illegal ivory determine the extent of poaching internationally, a weak judicial system, weak law enforcement institutions and corruption are major factors for ivory poaching and trafficking at the national level (UNEP *et al.*, 2013).

The Gabonese government has a strong commitment to elephant conservation and the fight against the illegal ivory trade; this has resulted in its adherence to several international agreements and conventions. Gabon ratified CITES in 1989 and adopted a forest code in 2001, supported by various decrees, including species classification, hunting regulation, rules for wild animal species detention, transport and commerce conditions but also the repression of offenses in these areas. In addition, a law on national parks was adopted in 2007. The sale of hunting rifles and ammunition was banned in 2013.

However, the legal and institutional challenges remain. An assessment mission conducted by UNODC in 2014, based on the ICCWC Toolkit for Wildlife and Forest Crime Analysis (UNODC 2014), identified several shortcomings in the Gabonese system. They included its legal arsenal, the functioning of the criminal justice system, inter-institutional and international cooperation and the capacity for law enforcement. Recent reports also suggest that corruption is a major challenge in the fight against ivory trafficking in Gabon (DLA Piper, 2015).

Indeed, the general legal framework in Gabon is not suitable yet to deal with the current wave of organized crime at the international level. Thus, the effective implementation of CITES has not been supported by appropriate national laws (CITES 2014). Penalties for poaching and ivory trafficking are low and among the lowest in Africa, with up to six month's imprisonment for elephant poaching. Revisions of the forest code and the penal code will soon be submitted to parliament that make ivory trafficking a serious crime. Nevertheless, these texts have not yet been adopted. In addition to low dissuasive sanctions, there is a very low rate of prosecution, linked to corruption and ignorance of the judicial proceedings concerning wildlife crimes. This situation has led to a strong feeling of insecurity among patrol staff and a high rate of recidivism among poachers

Given the facilitating role played by corruption in wildlife trafficking, legal and judicial frameworks established to fight corruption are as important as the framework to directly combat ivory trafficking (DLA Piper 2015). Gabon has a framework and multiple agencies and organizations to fight corruption and currently a major anti-corruption drive is underway (Operation Mamba).

Additionally, Gabonese law does not promote international cooperation in the fight against wildlife crime, which is crucial given that the range of forest elephants extends beyond administrative boundaries and is on an international scale. This is due to the fact that in Gabon there are no national law texts on international cooperation, for instance mutual legal assistance, extradition, transfer of criminal proceedings, transfer of sentenced persons or joint investigations (UNODC 2014).

The development of management plans for national parks, the NIAP (National Ivory Action plan), the national management plan for human-wildlife conflicts, the PNAT (national land use plan) have all demonstrated the ability of Gabonese institutions to define a strategic framework for conservation.

The Ministry of Water and Forests charged with the Environment and Sustainable Development (MEFEDD) was strengthened in 2007 by the creation of the National Parks National Agency (ANPN), whose operating budget has grown significantly since 2011 and has demonstrated its ability to attract external funding. Whilst the mandate of the ANPN is limited to national parks and their peripheral areas, the ANPN is changing to become the National Agency for the Preservation of Nature. The government's decision to expand the mandate of the ANPN will allow a more comprehensive and integrated approach and will facilitate biodiversity conservation and management throughout the country.

Finally, the weakness of wildlife law enforcement institutions is a major challenge for the conservation of elephants in Gabon, particularly for surveillance and anti-poaching, control of the private sector's compliance with legal procedures and further investigations. The lack of implementation capacity is due to the lack of training, but also to budget limitations, resulting in salary delays, insufficient operating budgets, lack of personnel and equipment. Lack of staff motivation, especially in the field, is a consequence and an aggravating factor of weak institutional capacity.

5. GABON'S STRATEGY TO PROTECT ITS ELEPHANT POPULATIONS

A strategy was developed to achieve Gabon's long-term vision for its forest elephants. It defines a goal to be attained over a period of ten years (2018-2028).

Key strategic objectives must be carried out to achieve the goal. These objectives were identified through the analysis of threats to elephant conservation in Gabon. A series of concrete targets has been established for each of these objectives, as well as a list of actions/activities to be implemented to achieve them.

Vision

The Gabonese government has a long-term vision for its elephants:

"Forest elephant populations in Gabon have vast forest areas across the country available to them and coexist with humans in a mutually beneficial relationship for the next hundred years and beyond."

Gabon is the only country that still has an elephant population distributed almost continuously throughout its territory, thanks to a low deforestation rate. The long-term vision is to promote the country's development in a manner compatible with elephants' needs, so that Gabon remains one of the major elephant range countries in Africa and a safe haven for forest elephants. The elephant will thus be able to fully play its ecological role in the maintenance of forest ecosystems and its economic role thanks to the development of tourism.

To achieve this vision, land-use planning will have to officially recognize three types of areas: national parks and reserves entirely dedicated to conservation; large priority conservation areas linked by corridors, in which resources exploitation is compatible with elephant protection; and areas reserved for human activities, including farming.

This vision must be shared and accepted by all sectors involved in land use in Gabon. A change in attitude in the general public, especially amongst rural populations, towards elephants is a key factor for their sustainable protection.

Goal

To fulfill this ambition, the strategy's goal over the next 10 years is:

"Stop the decline of elephant populations in Gabon and maintain their habitat and distribution in large interconnected conservation areas, while resolving human-elephant conflict and increasing the benefits of their conservation for the country by 2028".

In view of the current poaching crisis, the urgency is to stop the decline of elephant populations in Gabon, thanks to zero tolerance for the illegal killing of elephants throughout the country and the dismantling of ivory trafficking networks. Restoration of populations that have declined due to poaching will be promoted through habitat protection in priority conservation areas, larger than national parks, and connected by corridors. The legal recognition of these areas and their integration into the land-use planning process will ensure the presence of human activities consistent with the maintenance of elephant-friendly habitat in these areas.

In a context of increasing human activities, which increases the human-elephant interface, it is crucial to develop and implement effective solutions to ensure sustainable cohabitation. Tourism development to produce economic benefits from conservation for the country is a key factor for the long-term management of human-elephant conflict.

5.1 STRATEGIC OBJECTIVES

To fulfill Gabon's vision for its elephants and achieve the set goal, there are 8 key objectives, fully aligned to the AEAP:

1. *Protect elephant populations by minimizing poaching and ivory trafficking;*
2. *Ensure sufficient habitat to maintain elephant population abundance, distribution and connectivity;*

3. *Mitigate and sustainably manage human-elephant conflicts;*
4. *Increase awareness on elephant conservation and management;*
5. *Conduct research and monitoring to support conservation decisions with scientific evidence;*
6. *Strengthen cooperation among range, transit and market states;*
7. *Improve collaboration with local communities and broaden the revenue base by developing elephant-based tourism;*
8. *The National Elephant Action Plan for Gabon is effectively implemented.*

In the short term, it is crucial to minimize poaching and ivory trafficking, in order to prevent the local disappearance of some elephant populations, particularly in northeastern Gabon. The fight against poaching and the dismantling of ivory trafficking networks requires action at the law-enforcement level (e.g. patrols, investigations, intelligence, arrests and seizures) and with regard to wildlife legislation and the judiciary (legal framework, penalty structure, prosecutions, inquiry and sentencing) (Objective 1).

In the medium term, it is necessary to ensure maintenance of a favorable and sufficient habitat to accommodate viable populations of forest elephants, including the preservation of connectivity between populations at the national level (Objective 2). Protecting elephants in the long term requires mitigation of human-elephant conflict, in order to reconcile the country's economic development and elephant conservation (Objective 3). However, to change people's attitudes towards the presence of elephants in the vicinity of agricultural communities, mitigation of the human-elephant conflict situation alone will not be sufficient. Successful elephant conservation also depends on strong support from local communities. Such support is crucial for the development of intelligence networks, a reduction in direct killing and to improve tolerance levels in general. Community support will improve with raised awareness on the importance of elephant conservation, their ecological and cultural roles, and their potential economic importance to the country (Objective 4). Research on this relatively unknown species will support the implementation of the previous objectives (Objective 5). Initiating channels of communication with neighboring range states will facilitate the establishment of a regional intelligence taskforce that will boost the capacity to investigate and prosecute transnational crimes (Objective 6). With raised awareness on elephant conservation, community members should be able to more actively participate in conservation and reap some of its benefits. The development of elephant-based tourism, to generate income for local communities and the country in general, is a key factor for the long-term conservation of forest elephants in Gabon (Objective 7). Finally, the National Elephant Action Plan for Gabon needs to be effectively implemented (Objective 8).

To achieve each of the objectives identified, realistic targets have been identified as well as the priority activities to reach these targets. These targets and activities need to be considered by all stakeholders when developing strategic documents, such as national park management plans and land-use plans.

OBJECTIVE 1: PROTECT ELEPHANT POPULATIONS BY MINIMIZING POACHING AND IVORY TRADE

Target: By 2021, elephant numbers killed illegally will be reduced to acceptable levels (PIKE < 0.5)

To protect elephants from large-scale poaching and extensive and organized ivory trafficking networks, it is crucial to implement a law-enforcement strategy at the national level. The strategy is based on close inter-institutional collaboration, supported by modern technologies and the strengthening of international collaborations. Capacity building is essential at all levels of the law-enforcement chain, from the strengthening of patrols to the improvement of investigations and intelligence.

Implementation of this strategy will require increasing investment in protected-area protection, strengthening extractive industries' involvement in monitoring illegal activities and mitigating them through robust environmental and social management plans (PGES), intensifying controls at export points, developing an effective intelligence system and a strong and transparent ivory management system. Furthermore, the fight against organized crime requires the development of international collaboration and the use of modern investigative techniques to link crimes to criminals, link crimes to one another, dismantle networks and arrest sponsors. It will be supported by capacity building of the various institutions involved in patrols, surveillance, investigations and arrests: ANPN, DGFAP, army, police, gendarmerie, and customs. A special intervention unit has been set up in order to rapidly implement the prosecution of poachers and arrest traffickers across the country.

The monitoring strategy will also define an order of priority based on the magnitude and urgency of the threat to each site or national park. The defined measures will be set up in the different sites according to their importance for elephant conservation.

The fight against poaching and ivory trafficking is also inseparable from a strengthening of legal proceedings.

Effectively fighting elephant related crime is only possible with a sound criminal justice system, capable of repressing wildlife offenses, but also underlying offenses such as corruption. The Wildlife and Forest Crime Toolkit (UNODC 2014) will serve as a guide for achieving this goal. Strengthening the sanctions against poachers and ivory traffickers will be a major contribution to the protection of elephants in Gabon. This will require including ivory trafficking in the Penal Code, so that it becomes a serious crime.

The success of prosecutions and criminal convictions requires all the actors involved to have a good knowledge of the available legal arsenal and judicial procedures. Field officers will be trained regularly in evidence collection and the preparation of transcripts admissible in court. Magistrates will be trained in wildlife crime procedures, the application of new laws and forensic techniques.

Close collaboration between the institutions involved is essential for the successful prosecution of wildlife criminals, as well as for the enforcement of laws that do not directly address wildlife crime (especially illegal aliens).

The measures to achieve Objective 1 are detailed in Table 2.

Table 2: Activities required to achieve Objective 1

1st objective	Protect elephant populations by minimizing poaching and ivory trafficking		
Targets	Activities	Timeline	Indicators
1.1 National surveillance strategy available.	1.1.1 Develop a surveillance strategy for each National Park (in line with the management plan) after consulting with the different institutions and considering the surveillance and ecological data.	On-going	A monitoring strategy for each national park was developed and considered in a management plan after reviewing monitoring data and ecological data
	1.1.2 Develop a national surveillance strategy in collaboration with different institutions including controlling transport and traffic routes and country exit points using fixed border crossings and the deployment of sniffer dogs	On-going	A national surveillance strategy has been developed in collaboration with other institutions. Document available.
	1.1.3 Adapt the surveillance strategy based on intelligence and patrol data, including maintaining maps of trails and camps used by poachers and ivory trafficking networks	On-going	The surveillance strategy based on intelligence and patrol data was adapted and verified by using SMART.
1.2 Patrol staff well trained and available for deployment.	1.2.1 In each national park in each province, after the transition from National Parks National Agency to the National Agency for the Protection of Nature, assess needs in terms of staff and capacity building	On-going	Staffing and capacity building needs were assessed in each national park and in each province.
	1.2.2 Recruit necessary personnel to ensure the enforcement of wildlife law in different sites	On-going	All eco-guards are trained in wildlife law enforcement
	1.2.3 Review, develop and harmonize training programs for wildlife enforcement personnel.	On-going	Training programs reviewed and harmonized regularly
	1.2.4 Implement rigorous and focused staff training based on the responsibilities of	On-going	Rigorous and targeted training

	NAPN		of staff according to the responsibilities of NAPN has been put in place
	1.2.5 Implement a continuous training program for all staff including training in new anti-poaching and investigation techniques.	On-going	A continuing education program for all staff including training on new anti-poaching and investigative techniques has been implemented
1.3 All protected areas optimized and operational with regard to anti-poaching activities	1.3.1 Conduct a needs assessment in terms of infrastructure, equipment and communication in each national park and re-evaluate situation annually.	Finalized Annual update	A needs assessment in terms of infrastructure, equipment and communication in each national park was conducted and the situation will be evaluated each year
	1.3.2 Provide the necessary equipment, including appropriate transportation and ensure that rigorous inventory, maintenance and monitoring is in place.	On-going	The necessary equipment, including appropriate means of transportation has been provided, rigorous inventory, maintenance and monitoring procedures have been implemented. The procedure manual is available
	1.3.3 Continue construction and maintenance of the necessary infrastructure in each national park, including access routes and monitoring camps.	On-going	The construction and maintenance of the necessary infrastructure in each national park including access routes and monitoring camps is on-going
	1.3.4 Provide each national park with the necessary communication procedures and tools, including operating rooms for	On-going	Each national park was provided with

	information centralization and rapid response programming		the necessary communication procedures and tools, including operating rooms for centralization of information and rapid response programming. The procedure manual is available
	1.3.5 Ensure that each national park has an annual budget that is sufficiently large to operate and deploy regular patrols	On-going	An annual budget sufficient to operate and deploy regular patrols has been prepared, validated and made available to each national park, but needs to be revalidated annually
	1.3.6 Implement the anti-poaching strategy activities, including patrols with army and gendarmerie support where necessary.	On-going	Anti-poaching strategy activities, including patrols with the support of the army and the gendarmerie have been implemented
	1.3.7 Monitor the effectiveness of anti-poaching measures by developing appropriate tools but using SMART as a backup.	On-going	Monitor the effectiveness of anti-poaching measures by using different tools.
1.4 Poaching controlled outside protected areas	1.4.1 Conduct needs assessments for infrastructure, equipment, communication in each province and provide necessary equipment	On-going	Needs assessments for infrastructure, equipment, communication in each province were completed and necessary equipment provided. Updated assessments and provision annually.
	1.4.2 Strengthen controls at key export points and on ivory trafficking routes	On-going	Controls at key export points and ivory trafficking routes have been

			strengthened. Number of offenders apprehended.
	1.4.3 With input from the authorities responsible for the management of the various land concessions, identify threats, mitigation measures and needs for anti-poaching measures	On-going	Threats, mitigation measures and the need for anti-poaching measures were identified with the help of the authorities responsible for managing the various land concessions. Report available.
	1.4.4 Develop Memoranda of Understanding for protection measures implementation and ensure a regular presence of the ANPN and/or DGFAP on land concessions (patrols, permanent stations on remote sites)	On-going	Memoranda of Understanding developed and available.
	1.4.5 Incorporate protection measures (patrols, barriers, access roads control) in PGES (environmental and social management plans) including areas no longer being used	On-going	Protective measures (patrols, barriers, control of access roads) have been incorporated into PGES, Management Plans), including areas that are no longer used.
	1.4.6 Initiate and operationalize real-time monitoring systems, using SMART as backup	On-going	All PAs using new systems, evaluation on-going.
	1.4.7 Conduct awareness raising campaigns on wildlife laws and regulations for private sector (extractive industries, transporters) employees working or living in contact with wildlife.	2019 (Start)	Awareness campaigns on wildlife laws and regulations for private sector employees (extractive industries, carriers) were conducted and archived.
1.5 An intelligence network is operational to dismantle Ivory trafficking networks	1.5.1 Evaluate current intelligence network capacity on wildlife trafficking and identify areas for improvement.	2019 (Start)	The current capacity of the wildlife trafficking intelligence network has been assessed and areas for

			improvement identified. Confidential evaluation reports.
	1.5.2 Recruit and train personnel to develop and manage the intelligence and investigation network.	2019 (Start)	Staff to develop and manage the intelligence and investigation network was recruited and trained. Number of staff at work.
	1.5.3 Train all staff in data collection and transmission	On-going	Number of staff trained.
	1.5.4 Develop and manage informant networks within and around national parks.	2019 (Start)	Informant networks developed and managed in and around national parks.
	1.5.3 Improve the main operations room to centralize information in Libreville, including the use of specific software to facilitate the management of intelligence data.	On-going	The main headquarters operations room has been improved for intelligence and information management has been facilitated by the use of specific software.
	1.5.6 Develop real-time data transmission networks so the information can be used for a timely response	2019 (Start)	Real-time data transmission networks developed.
1.6 A special multi-institutional taskforce is available to respond to emergency situations anywhere in the country	1.6.1 Create and train an elite pursuit unit for forest intervention, who will use the real time data received from the operations rooms and will be made up of ANPN trackers and armed forces members.	2020 (Start)	An elite pursuit unit trained and ready for action.
	1.6.2 Create and train a special intervention force with the ANPN/DGFAP/Police/Gendarmerie that can react rapidly to intelligence information and stop traffickers (Multi-Agency Taskforce).	2020	Multi-Agency Taskforce (ANPN / DGFAP / Police / Gendarmerie) created and trained
1.7 Wildlife crime investigation is supported by innovative technical solutions	1.7.1 Strengthen the ivory detection sniffer dog units in order to multiply the seizures at the main export points and trafficking routes.	On-going	The sniffer dogs units reinforced
	1.7.2 Train officers in the use of sniffer dogs for detection and identification.	On-going	Number of officers trained
	1.7.3 Set up a scientific police laboratory in Libreville with qualified personnel to analyze wildlife and human evidence (fingerprints, ballistics and genetic	2020 (Start)	Scientific police laboratory with qualified personnel set up

	analysis)		in Libreville.
	1.7.4 Strengthen law enforcement personnel capacity to investigate wildlife related crime scenes and to provide forensic evidence in court with a traceability chain.	2020 (Start)	The ability of law enforcement personnel to investigate wildlife crime scenes strengthened and the chain of custody designed
	1.7.5 Analyze genetic samples of seized ivory to identify the areas targeted by poachers and the trafficking routes.	On-going	Number of genetic samples of ivory seized and analyzed
1.8 The national ivory management system is strong and transparent	1.8.1 Evaluate and improve where necessary the national procedures for seized ivory management and marking, including a national data base, strict chain of custody and systematic genetic sampling.	On-going	National management system process of ivory seized evaluated and improved.
	1.8.2 Improve and maintain a highly secure central storage facility for the national stock of seized ivory, weapons and other illegal wildlife products	On-going	A national system for transparent management of ivory stocks, weapons and other illegal wildlife products set up, operational and monitored
	1.8.3 Assess available decentralized ivory storage locations in terms of security, filing and storage capacity.	On-going	Decentralized ivory storage locations assessed
	1.8.4 Depending on identified needs, arrange, secure or construct secure storage facilities specifically for the temporary storage of seized ivory, weapons and other illegal wildlife products.	On-going	Secure storage facilities specifically for temporary storage of seized ivory, weapons and other illegal wildlife products identified, organized and constructed
	1.8.5 Establish secure storage space, independent of ivory stock, for the long-term storage of the ivory samples collected systematically.	2020 (Start)	Secure storage space, independent of the ivory stock, for the long-term storage of routinely collected ivory samples established
	1.8.6 Implement the marking, inventory and stock management system in all sites	On-going	The system for marking,

	involved in the seizure and/or storage of ivory.		inventory and management for all sites involved in the seizure and / or storage of ivory implemented
	1.8.7 Conduct annual audits of ivory stocks at the national level.	On-going	Number and reports on annual audits of ivory stocks at national level conducted
	1.8.8 Implement an action plan for stock disposal.	On-going	Availability of action plan
1.9 Dissuasive national legal framework	1.9.1 Amend existing criminal laws and review the forestry code in particular the provisions for penalties and sanctions.	On-going	Penal code adapted and strengthened with regard to wildlife crime. Legal documents circulated
	1.9.2 Transpose international conventions into national laws, especially CITES regulations.	On-going	Forestry code reviewed. Review available.
1.10 The actors in the legal chain are well trained in the fight against wildlife crime.	1.10.1 Regularly train field officers in criminal proceedings, detailed reporting and the collection of data and evidence on crime scenes (crime scene management), in order to send strong cases to court.	2019 (Start)	Number of field officers trained in criminal proceedings and evidence on crime scenes per time unit
	1.10.2 Train magistrates in the fight against organized crime, the specificities of wildlife crime, special investigation techniques, the use of evidence provided by forensic science and the fight against corruption.	2019 (Start)	Number of magistrates trained, aware, and cooperative.
	1.10.3 Develop guidelines on the applicable laws on wildlife crime to ensure maximum penalties.	2019 (Start)	Guidelines on the Laws of Wildlife Crime developed and circulated.
1.11 Strengthening of prosecution cases against wildlife crime	1.11.1 Establish a unit responsible for monitoring and evaluating the prosecutions linked to wildlife crime and in particular elephants	2019 (Start)	The unit responsible for evaluating prosecutions linked to wildlife crime is established and national judicial monitoring system set up and operational by 2028
	1.11.2 Create a database on wildlife crime prosecutions.	On-going	Database on wildlife crime prosecutions

			available.
	1.11.3 Follow the enforcement of sentences and penalties	On-going	Reports available
1.12 Opportunities for corruption reduced in the departments responsible for wildlife.	1.12.1 Develop and establish a code of conduct for staff of the wildlife authorities.	On-going	Code of conduct for staff of the wildlife authorities developed and circulated
	1.12.2 Implement strict rules regarding corruption cases amongst the wildlife authorities in line with government strategies	On-going	Strict rules on corruption cases among wildlife authorities in place and disseminated
	1.12.3 Create and train an anti-corruption unit for corruption cases examination including if necessary lie detection tests.	2019 (Start)	Anti-corruption unit set up and operational, at least 95% of the cases corruption observed during arrests and prosecutions are documented, forwarded to competent authorities and appropriate actions are taken against the corrupt agents.

OBJECTIVE 2: GUARANTEE SUFFICIENT HABITAT TO MAINTAIN ELEPHANT POPULATION ABUNDANCE, DISTRIBUTION AND CONNECTIVITY.

Target: *No measurable loss in the size of the elephant strongholds, with connectivity maintained and if possible improved for all key populations by 2028.*

The long-term maintenance of forest elephant populations in Gabon requires the provision of sufficient habitat to support a viable elephant population and allow their movement and dispersal. This requires strengthening habitat protection measures in priority conservation areas larger than national parks and connected by corridors. The boundaries of priority conservation areas will be defined by combining various scientific approaches to ensure their effectiveness. The corridors will meet several criteria (low risk, presence of a river) and will be tested and validated scientifically to ensure their use by elephants.

The legal recognition of these areas and their integration into the National Land Use Plan (PNAT) will ensure the long-term presence of extractive industries compatible with the presence of elephants. Good management practices, including national obligations and international best practices, will be improved to minimize the loss and fragmentation of elephant habitat. The effectiveness of the various mitigation measures proposed will be assessed, including long and spatially planned operation rotation cycles, road mapping, limitation of erosion and pollution.

This objective has synergies with Objective 5, since a better understanding of the ecology and habitat of elephants is an essential prerequisite for land use planning. In addition, reducing poaching pressure is a major factor in maintaining habitat for elephants (Objective 1).

Table 3: *Actions required to achieve objective 2.*

2nd objective :			
Guarantee sufficient habitat to maintain elephant population abundance, distribution and connectivity			
Targets	Activities	Timeline	Indicators
2.1 Priority conservation areas for elephants have been identified	2.1.1 Define and delineate priority conservation areas for elephants, necessary to maintain viable populations, using previous studies and more recent data on population densities, habitat and genetic particularities.	On-going	Maps of priority conservation areas for elephants available.
	2.1.2 Through legal documents, officially recognize priority conservation areas, not only protected areas but also large areas dedicated to other uses.	On-going	The national land use plan is available and all documents and maps are provided
2.2 Elephant habitat is	2.2.1 Evaluate the legal requirements	2019	The

sustainably protected in priority conservation areas	(EIA and development/land use plans) and international best practices (FSC standard) and their suitability for elephant habitat protection.	(Start)	requirements have been established, the National Land Use Plan has been validated and implemented, a guide to good practices for the protection of habitat has been developed and implemented
	2.2.2 Clearly define the obligations for habitat maintenance in elephant priority conservation areas and integrate them into the development/ land use plans and PGES of the land concessions in these areas.	2019 (Start)	Forest Management plans, land use plans, Environmental and Social Management Plans define habitat maintenance obligations for elephant conservation priority areas and include these in their documents.
	2.2.3 Train managers to implement good management practices for elephant habitat preservation	2019 (Start)	All managers trained on good management practices for elephant habitat preservation
	2.2.4 Train government officials to monitor and implement these obligations in the field.	On-going	Number of officials trained
2.3 Connectivity for elephants is maintained between priority conservation areas	2.3.1 Identify potential corridors between priority conservation areas for elephants, using predefined criteria and knowledge of the ecology and genetic structure of elephants and their responses to threats.	2018 (Start)	Number of corridors identified. Availability of reports.
	2.3.2 Formally classify corridors to maintain connectivity areas necessary for elephant movement	2018 (Start)	Number of corridors formally classified
	2.3.3 Develop agreements between different actors for the protection and/or restoration of the habitat in the corridors (delimitation of zones, awareness raising and patrols responsible for upholding the law)	On-going	Reports SMART data
	2.3.4 Develop Memoranda Of	On-going	Number of

	Understanding with bordering countries for the creation of buffer zones to ensure the continuity of protected areas on the other side of the border		protocols and memoranda drafted and signed with border countries.
2.4 National Land use planning in Gabon considers elephant population ecology and distribution	2.4. Include priority conservation areas and corridors in the PNAT to ensure the long term presence of extractive industries that deforest the least in these areas.	2020 (Start)	Priority Conservation Areas and Corridors have been included in the National Land Use Plan
	2.4.2 Examine existing and future roads and transport networks and assess their current and future traffic (using a range of scenarios including access to agricultural and mineral resources and connections between major urban centers) and the necessary mitigation measures	On-going	Transport networks are established, and put into a geographic information system for monitoring mitigation measures
	2.4.3 Examine current planned and proposed land use projects (including palm oil concessions) and assess the mitigation measures needed to reduce their negative impacts on elephant populations.	On-going	Expected spatial planning projects identified and transferred to a mapping system for monitoring mitigation measures
	2.4.4 Include mitigation measures for roads, railways and various land-use projects in the PNAT.	2020 (Start)	Mitigation measures for roads and various land use projects in the PNAT
2.5 A monitoring and evaluation system is implemented	2.5.1 Implement monitoring of human activities and elephant populations in priority conservation areas and corridors.	On-going	Human and elephant population activities in the corridors monitored
	2.5.2 Strengthen compliance monitoring with legal procedures (drafting, approval, implementation and monitoring for development plans and PGESs)	2019 (Start)	Compliance monitoring and legal process incorporated into approved EIAs and PGES for all permits located in the priority Conservation Areas for Elephants
	2.5.3 Develop and implement evaluation charts and procedures to check good harvesting practices and habitat quality for elephants.	2019 (Start)	Procedures and good practices for collecting data on habitat quality and

			elephant populations are collated in a manual of procedures
	2.5.4 Evaluate the effectiveness of corridors using different techniques, such as trap cameras and radio collars.	2022 (Start)	Efficiency of the corridors is evaluated using different techniques such as cameras traps and radio collars, report available.

OBJECTIVE 3: MITIGATE AND SUSTAINABLY MANAGE HUMAN-ELEPHANT CONFLICT

Target: Human-elephant conflict reduced to acceptable levels with zero loss of human life by 2028.

To mitigate human-elephant conflict and change the perception of local populations towards elephants, it is crucial to implement a national strategy in collaboration with all stakeholders (government institutions, private sector, and local population). The HEC Management Unit (HEU) will be strengthened by the participation of the other institutions involved. More and better trained staff will benefit from the experience gained in other elephant range countries through regular exchanges with international experts (IUCN Focus Group, NGOs).

We will implement a program of electric fence establishment to protect subsistence and semi-commercial farms in all rural communities affected severely by elephant crop raiding. We will also test a range of mitigation measures that may help to mitigate HEC in areas with less severe issues.

IGAD (Gabonese Institute for Development Assistance) will provide support to adapt agricultural practices, to settle crops in one place, plan agricultural sites zoning and increase productivity to compensate losses up to an acceptable level. These measures will have to be tested across Gabon to ensure their feasibility and effectiveness.

The tolerance threshold of the local populations will be increased by field agents trained in conflict management and the establishment of a financial compensation system, as outlined in the new forest code (currently being revised). A direct compensation system for damage is important when there is loss of life or all food resources are lost, but the sustainability of the various local insurance systems will be assessed first. Simplified procedures for reporting damage, establishing a case and accessing mitigation measures will also be established and

implemented by ANPN who will transmit all reports to DGFAP. DGFAP will consider compensation claims and disperse any payments.

To ensure the sustainable management of HEC, it is essential to integrate local populations into the decision-making process and to make them accountable for the implementation of mitigation measures. The role of local management advisory committees (CCGLs), which are good platforms for local involvement, will be strengthened by HEC management. These participatory management bodies will ensure that the local people benefit from the parks' future economic benefits, which are an indispensable measure for the sustainable management of HEC.

This objective is closely linked to Objective 1, because effective law enforcement is essential to limit the displacement of elephant populations to villages, but also to Objective 2, since the mitigation of HEC also requires measures at the national level including appropriate land use planning. Scientific research, including the understanding of natural seasonal movements and of disruptions to elephant movement taking them to the villages, will also contribute to improved HEC management (see Objective 5). Finally, the involvement of local communities in the future economic benefits of national parks, as a global compensation for coexistence with wildlife (objective 7) is essential to the long-term resolution of the conflict.

Table 4: *Actions required to achieve objective 3.*

3rd objective :	Mitigate and sustainably manage human-elephant Conflict (HEC)		
Targets	Activities	Timeline	Indicators
3.1 The specialized unit in charge of Human-Elephant Conflict in Gabon (UHE) is operational	3.1.1 Strengthen UHE staffing and training, including the provincial sub-units	On-going	HEC unit set up and operational, reports available
	3.1.2 Organize exchanges with counterparts in other countries and HEC specialist (IUCN action group, experienced NGOs)	On-going	Reports justify exchanges with counterparts from other countries and HEC specialists (IUCN Action Group, experienced NGOs). Available reports
	3.1.3 In consultation with various stakeholders (DGFAP, ANPN, Ministry of Agriculture, IGAD, and Farmers) revise the forest code, the national strategy for HEC management and provide the implementation decrees.	On-going	Forest Code is revised, implementing decrees are provided and a national HEC strategy is set up and operational
	3.1.4 Guarantee the financing and resources for the UHE	2016-2025	Annual technical and financial reports

3.2 Guidelines for the mitigation of crop depredation by elephants are available.	3.2.1 Identify mitigation methods to reduce the probability of harvest damage by elephants by compiling information from Gabon and around the world as well as available recommendations and tool kits (IUCN, FAO)	In progress	Mitigation methods identified, toolkit available and tested, and a national method adapted. Reports on pilot models available.
	3.2.2 Test the effectiveness of identified methods using specific scientific protocols, in several sites across the country.	In progress	Effectiveness of the methods identified, tested, and justification reports available.
	3.2.3 Investigate the possibility of implementing local insurance policies with private companies or low-cost premium to compensate for the damage done by elephants to farmers.	2020 (Start)	Reports available.
	3.2.4 Based on the results of the studies carried out, develop guidelines for the mitigation of crop depredation risks for farmers and local authorities.	2020 (Start)	Guidelines for the mitigation of crop depredation risks developed and reports available
3.3 Local communities are actively involved in managing HEC	3.3.1 Designate local rapporteurs and community guards to work closely with the UHE.	In progress	Rapporteurs and community guards working with HEU identified and designated
	3.3.2 Strengthen the involvement of the CGLs and other local organizations in HEC assessment and management.	2020 (Start)	CCGL and other local organizations working in the evaluation and management of HEC strongly involved. Reports available.
	3.3.3 Conduct regular awareness raising campaigns on wildlife law, established guidelines and complaint procedures.	2020 (Start)	Awareness campaigns on wildlife law, guidelines and complaint procedures established and conducted regularly. Reports available.
	3.3.4 Support local communities in the implementation of mitigation measures	2020 (Start)	Number of local communities supported in the

			implementation of mitigation measures. Report.
3.4 Simple and effective procedures are in place for conflict and damage reporting	3.4.1 Develop a simplified administrative procedure to report crop damage and encourage the reporting of all incidents (i.e. by phone)	2020 (Start)	Simplified administrative procedure for reporting crop damage and encouraging the reporting of all incidents is developed and documented in the Procedures Manual.
	3.4.2 In consultation with the DGFAP, the ministry of agriculture, the ANPN, identifies effective and cheap methods to evaluate and quantify elephant damage.	On-going	Effective and inexpensive methods for assessing and quantifying elephant damage. Reports available.
	3.4.3 Produce guidance documents for government officials, especially for publicizing enforcement decrees.	2021 (Start)	Guidance documents for government officials and implementing decrees produced and published in official journals.
	3.4.4 Train government officials in the assessment of crop damage, according to a standardized protocol and to produce reports.	On-going	Number of Government officials trained in crop damage assessment according to a standardized protocol. Product reports available.
	3.4.5 Train field officers (ANPN, DGFAP) in conflict management with villagers.	2021 (Start)	Number of field officers (ANPN, DGFAP) trained in conflict management with villagers. Reports available.
3.5 HEC monitoring mechanism is in place.	3.5.1 Create a national HEC database and rapid information transmission procedures to track the impact of crop depredation.	2021 (Start)	A national HEC database on rapid information transmission procedures to

			monitor the impact of crop depredation has been created and is available.
	3.5.2 Evaluate and monitor change in local populations' and the general public's perception of crop damage by elephants.	2021 (Start)	Changes in the perceptions of local populations and the general public regarding crop damage by elephants have been assessed and monitored regularly. Reports available.
	3.5.3 Conduct audits to monitor the proper management of the financial compensation system.	2021 (Start)	Audits to monitor the proper management of the financial compensation system are regularly conducted. Audit reports available.

Objective 4: Increase awareness on elephant conservation and management

Target: All relevant stakeholders, including the Gabonese public are generally supportive of elephant conservation by 2028

Elephant damage is less common than rodent damage, but it is more important (Lahm 1996, Fairet 2012). Elephants can destroy an entire field in one visit. Loss of income and food resources can be dramatic for villagers, particularly because of the low productivity of village crops and the annual planting rate. Human-elephant conflict leads to negative and even hostile attitudes, posing a threat to conservation.

The Gabonese government's growing concern for the resolution of human-wildlife conflicts has resulted in a series of workshops since 2010. These workshops propose a national strategy for human-wildlife conflict management (currently under revision) and develop, with the support of the FAO, a toolkit for the assessment and mitigation of these conflicts. However, in the light of

the gravity of the situation, in 2016 when charged by the government with managing the HEC situation, ANPN decided to focus on well designed and maintained electric fences as well as the ability to implement a mortal solution in extreme cases.

In addition, since 2012, the ANPN has been developing national parks Local Management Advisory Committees (CCGL), which consider the need for raising awareness and the rights of the local communities in the peripheral areas. Because tourism is not yet developed in Gabon, local communities do not yet benefit from national park economic rewards to compensate for the negative impacts of cohabiting with elephants. Local people, especially through CCGLs, are only beginning to get involved with conservation, while in the meantime it is a prerequisite for forest elephant survival to raise awareness among local communities, especially those living close to elephants.

Not only community members, but also the business community, politicians, relevant government officials, and officers of the enforcement agencies are frequently not aware of the seriousness of the situation – on one hand the declining elephant numbers, the economic importance of elephants for the country, the loss of integrity of the habitat, and the increase in trafficking and trade in illicit ivory, but on the other hand the (upcoming) changes in the penalty structure, raising the deterrence level for wildlife crimes. A country-wide sensitisation program is required, targeting each of these main stakeholders, but not excluding the general public.

Table 5: *Actions required to achieve objective 4.*

4 th objective :	Increase awareness on elephant conservation and management		
<i>Targets</i>	<i>Activities</i>	<i>Timeline</i>	<i>Indicators</i>
4.1 Implement a communication awareness strategy centered around elephant conservation	4.1.1 Strengthen the capacity of the ANPN Communications Unit, both in terms of expertise and equipment, to facilitate changing the public opinion on elephant conservation issues.	On-going	Well-equipped communication team operational and behavioral changes noticeable and measurable. Reports available.
	4.1.2 Develop a communication awareness strategy centered on elephants aimed at all relevant stakeholders.	On-going	Strategy developed and circulated.
	4.1.3 Produce and disseminate awareness raising tools about the importance of elephant conservation, wildlife laws and government action. These awareness tools need to be tailor-made for each target group – that is school children and students for long-term conservation perspectives, communities and the general public, local and national politicians and enforcement agencies, and the business community, especially those working in the extractive industries.	On-going	Tools to raise awareness about the importance of elephant conservation, wildlife laws and government action produced and disseminated. Report available.
	4.1.4 Develop a communication strategy to	2019	Strategy

	regularly inform other government institutions and relevant stakeholders on management decisions pertaining to elephant conservation.	(Start)	available and circulated
	4.1.5 As far as this is practically feasible, incorporate relevant traditional beliefs and practices in the conservation and management of the African forest elephant.	2019 (Start)	Report on relevant traditional beliefs and practices available and evaluated.
	4.1.6 To sway the public against foreign and domestic threats to Gabon's natural heritage through campaign messaging that improves understanding and nurtures national pride with regard to parks and wildlife.	2019 (Start)	Noticeable and measurable changes in the public opinion towards conservation
	4.1.7 To change the narrative regarding human-elephant conflict by highlighting pilot mitigation projects, identifying target villages for expansion and broadcasting the link between rural crop raiding and forced migration of elephants through commercial activities and poaching.	2019 (Start)	Lowered HEC incidence and improved public opinion on conservation
	4.1.8 Support national efforts to develop an economically contributory ecotourism industry.	2019 (Start)	Facilitation of tourism development
	4.1.9 Work closely with international organizations such as WildAid to develop a target-specific communications strategy with the principal aim to reduce the international demand of ivory.	2019 (Start)	Reduction in ivory demand Lowered ivory prices

OBJECTIVE 5: CONDUCT RESEARCH AND MONITORING TO SUPPORT CONSERVATION DECISIONS WITH SCIENTIFIC EVIDENCE

Target: *By 2020, a scientifically based monitoring program is generating in-depth information on the status of the national elephant population as regular feedback for adaptive management.*

Scientific monitoring and research programs play an important role in the field of elephant conservation and management. They improve knowledge on forest elephant’s ecology and the status of the population in Gabon. Priority is given to adaptive research programs to guide conservation actions (connectivity and seasonal distribution studies) and/or to evaluate their effectiveness (including density estimates, indicators such as MIKE and ETIS, origin of seized ivory, elephant movement tracking). Elephant research activities will be coordinated at the national level to harmonize methods and avoid effort duplication.

Gabon has long been a testing ground for new methods and will continue to play a leading role in conservation science for the preservation of forest elephants. To effectively support conservation actions, scientific research will develop more efficient monitoring tools in terms of time expended and cost incurred. Traditional approaches and new technologies (genetics, camera traps, acoustic monitoring, aerial monitoring ... etc.) will be combined and tested in order to effectively monitor the status of elephant populations, poaching levels and the extent of ivory trafficking.

This goal is closely linked to Objectives 1 and 2, to guide law-enforcement strategies and to define priority conservation areas and corridors.

Table 6: *Activities required to achieve objective 5.*

5 th objective	Conduct research and monitoring to support decisions with scientific evidence		
Targets	Activities	Timeline	Indicators
5.1 The national natural resource data base is up-to-date	5.1.1 Complete the inventory of Gabon’s natural resources, including elephant density assessment at national level.	In progress	The natural resources inventory and elephant density assessment completed and report available.
	5.1.2 Undertake a more in-depth inventory of key elephant populations, develop new and efficient inventory methods and compile the results of previous studies.	In progress	A more in-depth inventory of the main elephant populations and the compilation of the results of previous studies have been

			undertaken. Report available.
	5.1.3 Create a national database of all recent and old elephant data.	2019 (Start)	A national database of all recent and old elephant data created.
5.2 Elephant research is coordinated at national level	5.2.1 Set up a research team in charge of developing key elephant research programs and coordinating the research projects at national level	2019 (Start)	A research team in charge of developing key elephant research programs set up and operational.
	5.2.2 Develop a forest elephant strategy for the ANPN based on conservation needs.	2019 (Start)	A forest elephant strategy for the ANPN based on conservation needs developed. Report available.
5.3 Ensure that research results help to guide conservation actions (adaptive research).	5.3.1 Implement major research programs such as population dynamics & structure in selected sites (baï monitoring), genetic structure of populations, the study of seasonal movements through radio tracking and recognition, extractive industries impact, health monitoring.	In progress	Major research programs implemented.
	5.3.2 Put in place mechanisms for research programs results to be regularly reported to the various actors involved in elephant management.	2019 (Start)	Mechanisms for communicating research results in place.
5.4 Research enables evaluation of the effectiveness of conservation actions	5.4.1 Test and compare the different forest elephant population inventory techniques available to establish an efficient methodology in terms of cost and time.	2019 (Start)	Inventory techniques tested and compared. Report available.
	5.4.2 Implement regular monitoring of the elephant population status in national parks, priority conservation areas and corridors.	2019 (Start)	Regular monitoring of the status of the elephant population in national parks, priority conservation areas and corridors is put in place
	5.4.3 Develop and implement indirect population monitoring indicators (standardized data collection on carcasses and ivory tusks, genetic analysis of seized ivory).	On-going	Indicators for indirect population surveillance (collection of standardized data

			on carcasses and ivory tusks, genetic analysis of seized ivory developed and implemented. Report available.
	5.4.4 Encourage the development of new conservation technology for monitoring populations and poaching pressure (drones, thermal imaging, cameras, etc.)	In progress	New conservation technologies for monitoring populations and poaching have been taken into account and implemented. Report available.
5.5 Research conducted in Gabon supports international decisions	5.5.1 Develop regional studies and/or harmonize the methods being used to increase knowledge of the forest elephant (regional inventory, genetic structure)	2019 (Start)	Regional studies and methods to increase knowledge about the forest elephants developed and harmonized. Report available.
	5.5.2 Share the results with international databases (African Elephant database, MIKE, ETIS) to increase awareness of forest elephant status and knowledge of their taxonomy.	2019 (Start)	Results shared with MIKE and ETIS. Reports available.

OBJECTIVE 6: STRENGTHEN COOPERATION AMONG RANGE STATES

Target: Enforcement taskforce established for regional agencies by 2020.

International collaboration in investigations and prosecutions, particularly with border countries, but also with transit countries and countries importing ivory, are essential for the fight against organized international trafficking. Joint patrol programs with Cameroon and Congo have been initiated but remain underdeveloped in Gabon. However, Gabonese law does not promote international cooperation in the fight against wildlife crime, which is crucial given that the range of forest elephants extends beyond administrative boundaries and is on an international scale. This is due to the fact that in Gabon there are no national law texts on international cooperation, for instance mutual legal assistance, extradition, transfer of criminal proceedings, transfer of sentenced persons or joint investigations (UNODC 2014). Legislation on international cooperation needs to be amended to establish official protocols with regard to collaboration with regional and international countries to jointly dismantle the large criminal networks (Table 7).

Table 7: Activities required to achieve objective 6.

6 th objective	Strengthen cooperation amongst range states		
<i>Targets</i>	<i>Activities</i>	<i>Timeline</i>	<i>Indicators</i>
6.1 Official collaboration established at regional and international level to dismantle trafficking networks.	6.1.1 develop and sign official collaboration protocols with bordering countries including anti-poaching harmonization, joint actions, border controls, intelligence and data exchange and prosecution facilitation.	2019 (Start)	Official collaboration protocols with neighboring countries drafted and signed.
	6.1.2 Implement patrols, joint seizures and border control with bordering countries	On-going	Patrols, seizures and joint border controls with neighboring countries implemented.
	6.1.3 Develop direct collaboration with law enforcement bodies in ivory transit and ivory consumer countries to further investigations and exchange information	2019 (Start)	Direct collaboration with law enforcement agencies in ivory transit countries and ivory consuming countries has been developed. MoUs signed and available.
	6.1.4 Rely on international organizations (ITERPOL, CEEAC) and existing networks (WEN, TRAFFIC, Giants' Club, etc.) to promote collaboration for elephant conservation	2019 (Start)	Collaboration with international organizations for the conservation of elephants is effective.
	6.1.5 Develop sample and/or data exchange networks with forensic laboratories in Africa and Asia to harmonize techniques at the international level.	2019 (Start)	Networks for the exchange of samples and / or data with forensic laboratories in Africa and Asia have been developed to harmonize techniques at the international level.

OBJECTIVE 7: IMPROVE COLLABORATION WITH LOCAL COMMUNITIES AND BROADEN REVENUE BASE BY DEVELOPING ELEPHANT-BASED TOURISM

Target: By 2028, the revenue base is broadened to such an extent that both communities cohabiting with elephants as well as the State receive considerable benefits from elephant-based tourism.

The development of elephant-based tourism is part of the government's vision for tourism development in Gabon, which aims to make Gabon the world's leading destination for tourism related to the African rainforest (White *et al.* 2011).

The short-term NEAP strategy is based on the construction of quality ecotourism structures and the sighting of flagship species such as gorillas and elephants. The Gabonese government plans to invest in private partnerships to finance high-end lodges. The launch of a pioneering tourism activity will help support tourism industry development, by endorsing new tourism products and expanding the hospitality sector, essential for establishing luxury lodges. The structures will continue to offer mid-range option and will offer a preferential rate to domestic tourists.

Several flagship sites will be developed to showcase their potential and attract foreign investors. Forest elephant observation will be promoted thanks to the renovation and/or the establishment of platforms in the Langoué bai and its satellite baïs (baï: a forest clearing with a river/stream running through it), the big baï of Mwagna and the Batéké Plateaux. The potential of several sites for elephant sighting under good conditions will also be assessed, for instance approaching them on foot on the beaches of Pongara National Park and in the baïs of Loango National Park, in Lopé National Park, and by canoe in Akaka.

The sustainable tourism strategy proposed by the Gabonese government is also intended to generate jobs and income for local people (Table 8). Local community involvement and their support are essential for the long-term conservation of forest elephants in Gabon. The role of the CCGs will be strengthened, notably by deeper involvement in the management of human-elephant conflict and tourism related income. The expansion of tourism in Gabon, generator of jobs and income, will be closely linked to education and awareness raising campaigns aimed at changing the Gabonese people's perception of elephants.

Table 8: Activities required to achieve objective 7.

7 th objective	Improve collaboration with local communities and broaden the revenue base by developing elephant-based tourism		
Targets	Activities	Timeline (Years)	Indicators
7.1 Elephants seen as an attractive tourism product in Gabon.	7.1.1 Develop an elephant-based tourism strategy	Finalized	An elephant-based tourism strategy has

			been developed. Report available.
	7.1.2 Promote a certain number of tourism products to encourage private sector investment.	2018-2019 On-going	A number of tourism products have been identified and promoted
	7.1.3 Build 10 ecotourism structures on flagship sites for mega fauna sighting, including 3 tourism circuits.	2018-2019 On-going	10 ecotourism structures at the flagship sites and 3 tourism circuits for mega-wildlife viewing have been built.
	7.1.4 Generate communication tools in order to promote Gabon as key (eco) tourism destination for foreign travellers.	On-going	Communication tools on Gabon as a key (eco) tourism destination for foreign travelers have been generated and promoted.
7.2 local communities benefit from tourism income	7.2.1 Strengthen the local community involvement in the decision-making process and the benefits of conservation (tourism) generated revenue.	2019 (Start)	Community participation in the decision-making process and the benefits of the revenues generated by conservation has been strengthened.
	7.2.2 Create jobs for local people in all the sectors linked to tourism	2019 (Start)	Number of local people at work.
7.3 Local communities benefit from tourism income	7.1.3 Train and hire local tourism guides	In progress	Number of local tourism guides trained and hired

OBJECTIVE 8: IMPLEMENT GABON’S NATIONAL ELEPHANT ACTION PLAN

Target: 90% of Gabon’s NEAP effectively implemented by 2024.

NEAP implementation will require the appointment of a coordinator/coordinating committee. The coordinator will be responsible for broadcasting the NEAP and establishing and maintaining close relations with the various government partners. He/she will also be the focal point for all non-governmental partners and donors, who will have to tighten collaboration with the Gabonese government for the implementation, financing and monitoring of all elephant conservation related activities.

In collaboration with the different partners, annual NEAP workshops will assess progress of NEAP targets and objectives implementation, adapt the strategy to new potential threats and define an annual work plan, including a series of priority actions.

The NEAP will be the framework for defining each government institution’s and their partners’ roles and responsibilities. Official memorandums of understanding between different institutions and private sector partners will coordinate actions, harmonize procedures, and set up communication and data management networks. Coordination among NGOs, donors, and government research institutions will also be strengthened, to avoid duplicating efforts across the country, facilitate national capacity building, and strengthen the links between scientific research and elephant population management.

Projects corresponding to the priority actions of the annual work plan, developed by the government and / or partners, will be submitted to the coordinator / coordinating committee and included in the annexes of the NEAP. The coordinator will work with donors to simplify the funding of priority projects.

The coordinator will also monitor and evaluate the implementation of priority activities. Reports and results will be collected in a central database and will contribute to an annual report.

NEAP implementation will require the development of an elephant-centered communication strategy to ensure awareness and adherence from all stakeholders. A communication team will be responsible for producing and disseminating education and awareness raising tools related to the importance of elephant conservation, knowledge of wildlife laws and actions by the Gabonese government.

The necessary actions needed for NEAP implementation are presented in Table 9.

Table 9: Activities required for NEAP implementation.

Activities	Sub-activities	Timeline	Indicators
8.1 Establish a clear framework for NEAP	8.1.1 Appoint a NEAP coordinating committee (including a coordinator and	In progress	CC, coordinator and focal point

implementation.	central focal point)		in place
	8.1.2 Publicize the NEAP and establish close and consistent relationships with partners	On-going	NEAP published
	8.1.3 Organize annual meetings between stakeholders and invite the NEAP coordinators from neighboring countries.	2018 onwards	Regular meetings held
	8.1.4 Define the priority actions for the Gabonese government.	On-going	
	8.1.5 Define clear procedures for partners to coordinate activities and funding	On-going	Procedures developed and communicated
8.2 Reinforce coordination between government institutions.	8.2.1 Define and clarify the roles and responsibilities of each institution in each NEAP objective, target and measure implementation.	On-going	Roles clarified
	8.2.2 Establish official collaboration agreements for information exchange and coordinated action implementation for elephant conservation	On-going	Agreements in place
8.3 Reinforce collaboration with non-governmental partners and the private sector	8.3.1 Establish Memoranda of Understanding with transport carriers (SETRAG, ports, airports, transport companies) and extractive industries.	2019 (Start)	MoUs in place
	8.3.2 Encourage the sharing of data relevant to elephant conservation between government institutions and their partners.	2019 Start)	Protocols developed
	8.3.3 Coordinate activities carried out by Government institutions and NGOs to ensure results complementarity and circulation	2018 onwards	Annual implementation meetings
8.4 Follow progress on the implementation of priority actions	8.4.1 Work in collaboration with the funding bodies for the financing of priority actions	2018 onwards	Regular communications
	8.4.2 Develop procedures for monitoring and evaluating the implementation of government and partners activities	2018 onwards	M&E plan developed and communicated
	8.4.3 Collect relevant reports and information for the NEAP and archive them in a central database	2018 onwards	Database active
	8.4.4 Provide an annual report of the implementation for the government and the funding bodies.	2018 onwards	Proceedings of implementation meetings circulated annually

CONCLUSION

This integrated national strategy for the survival of forest elephant populations in Gabon is a comprehensive program that will be implemented by the ANPN, in close collaboration with the Fauna and Protected Areas Department (DGFAP) part of the Ministry for Protection of the Environment, Natural Resources, Forests and Sea (MPERNFM). The NEAP should be used to guide all strategies and decisions of relevant government institutions, including customs, transport, agriculture, justice and law enforcement forces.

This strategy aims at stabilizing major elephant populations, improving protection and environmental law enforcement, defining conservation areas for elephants, reducing human-elephant conflict, promoting a positive image of elephants, and expanding the knowledge on forest elephants.

The NEAP is an adaptive strategy that will be updated annually to integrate new information and define priority actions and an annual work plan. Significant resources will be mobilized by the Gabonese government to implement this strategy, but to fully succeed and fulfill Gabon's commitment, additional funding from international donors and the private sector will be needed.

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ANNEXES

PROJECT PROPOSAL GA1

Country: Gabon

Lead Institution: ANPN

Duration of Project: 10 years

NEAP Objective, Target & Action: Objective 1, Target 1.2 & 1.3 (All Activities)

Title:

Provide Gabon's National Parks' network with optimum human resources.

Rationale:

Gabon is one of the last bastions of forest elephants; it is home to 50% to 60% of the current world population (Maisels *et al.*, 2013). However, the country has become the target of organized crime groups, leading to the rapid decline of some populations. The situation is particularly critical in the North-East of the country, which has been identified as one of the two main source sites for illegal ivory in Africa over the past decade (Wasser *et al.*, 2015). A strong response is crucial for ending poaching and securing Gabon's national parks, which are safe havens vital for the survival of the species.

Over the past five years, Gabon's strong commitment on a political level has resulted in an increase in the budget allocated to the National Parks National Agency (ANPN). As a result, the number of staff increased from just 60 in 2010 to 700 in 2016, the majority of whom are employed by the Gabonese government. However, the managing authorities consider that the effective management of the network of 13 national parks, covering an area of 3 million hectares, requires a staff of 1,200 to 1,500 people. Gabon being heavily dependent on oil revenue, the current economic situation is leading the government to call on international partners and the private sector to hire an additional 500 field agents, which will triple the number of eco-guards active in the field and reach staff number targets for Gabon's national park system. Recruited staff will also receive training and equipment to effectively contribute to the management of Gabon's 13 national parks, which are of critical importance for forest elephant survival.

Objective:

The project objective is to increase Gabon's National Agency of National Parks (ANPN) field staff by 500 over a period of 5 years and provide them with the training and equipment necessary to effectively protect and manage the local elephant populations, which account for more than 50% of the current world forest elephant population.

Expected outcomes:

The projects expected outcomes are as follows:

- 1) The National Parks network has 425 new eco-guards, trained and equipped for anti-poaching;
- 2) The national parks network has 75 dedicated Area Managers (middle managers) to assist in park management and business planning;
- 3) The national parks network has sufficient transportation means and operational budget to be able to deploy the trained teams in the field.

The expected results over the next 10 years are as follows:

- 4) The new recruits are progressively integrated into the workforce supported by the Gabonese government;
- 5) Forest elephant densities return to their natural densities in most of the priority sites and landscapes.

Relationship to the AEAP, NIAP and EPI:

Relationship with the AEAP

This project is in line with the objectives and strategies of the African Elephant Action Plan (AEAP), in particular Objective 1; To reduce the illegal killing of elephants and the illegal trade in elephant products, with Strategy 1.1: Strengthen the capacity of enforcement authorities / agencies to combat poaching and the illegal trade in ivory and other elephant products. Activity 1.1.2.: Recruit and train staff at all levels to combat poaching and the illegal trade in ivory and other elephant products.

Relationship with the EPI

Gabon is one of the founding countries of the Elephant Protection Initiative (EPI). This project is part of its National Elephant Action Plan (NEAP), developed as part of the EPI with the support of Stop Ivory. This project will directly contribute to the implementation of the AEAP, which is the main goal of the EPI.

Actions/activities, methods, actors and timelines:

Actions/activities:

This project is in line with Objective 1 of Gabon's NEAP, in particular targets 1.2: The wildlife law enforcement staff is well trained and available for deployment and 1.3: Protected areas are operational for Anti-poaching actions (LAB) for the first time

The activities necessary to achieve the objectives are the following (including the reference to the activities included in NEAP in Gabon):

- Recruit 425 eco-guards (activity 1.2.2);
- Recruit 75 assistant conservation officers (Activity 1.2.2);

- Train recruited personnel (Activity 1.2.4);
- Evaluate the equipment needs of each national park (activity 1.3.1);
- Provide necessary equipment including appropriate transportation means (activity 1.3.2);
- Ensure that each national park has a sufficient annual budget to ensure the operation and deployment of the patrols (activity 1.3.5);
- Deploy the reinforced teams in the field to implement the LAB activities foreseen in the monitoring strategy (activity 1.3.6).

Methods:

(1) Recruit 425 eco-guards

Field staff reinforcement is critical to increase presence and expand surveillance coverage by patrols on foot. This approach is made necessary by the dense forest cover of 80% of the territory and the virtual absence of roads in Gabon's network of National Parks. Although there have been improvements since 2007, the number of eco-guards is still largely insufficient compared with the surface to be watched and the intensity of the threat. For example, Minkébé National Park, which is currently under intense poaching pressure by gangs of 15 to 50 people who do not hesitate to shoot at eco-guards, only has 36 eco-guards for 7,500 km² of forest. In addition to army support during patrols on-foot, it is urgent to double eco-guards numbers.

The sharp increase in illegal human activities, in particular elephant poaching, and the rapid decline of some elephant populations have led the National Parks Agency to reassess its needs in terms of field staff. The minimum number of eco-guards required has been defined in accordance with the recommendations of the 2016-2020 management plans, which have been revised upward in the parks currently experiencing a critical situation. A total of 425 eco-guards will be recruited to reinforce the current strength of 236 eco-guards across Gabon's National Park system. This recruitment will be done gradually, in waves of 85 eco-guards per year for 5 years. These eco-guards will be recruited by the human resources department, according to current ANPN procedures and the determined Reference Terms and salary grid.

The allocation of eco-guards in the different National Parks during each recruitment session will follow an order of priority determined by the intensity of the threats. For example, in National Parks in Northeastern Gabon, in particular Minkébé National Park, eco-guard numbers will be increased as a priority because of the extent of poaching and the importance of these sites for elephants. Furthermore, funding has already been secured from the World Bank to increase by 45 the number of eco-guards in the national parks of Loango, Moukalaba Doudou, Waka and Mayumba. With European Union (ECOFAC program) funding, 35 more eco-guards will be recruited for the Lopé and Mayumba National Parks in 2018.

Table 1: Present number of eco-guards and number of eco-guards to be recruited for each of the 13 National Parks in Gabon

<i>National Parks</i>	<i>Present number of eco-guards (2016)</i>	<i>Number of eco-guards to be recruited</i>
<i>Akanda</i>	<i>12</i>	<i>31</i>
<i>Birougou</i>	<i>9</i>	<i>17</i>
<i>Ivindo</i>	<i>19</i>	<i>34</i>
<i>Loango</i>	<i>18</i>	<i>31</i>
<i>Lope</i>	<i>13</i>	<i>40</i>
<i>Mayumba</i>	<i>12</i>	<i>20</i>
<i>Minkebe</i>	<i>36</i>	<i>78</i>
<i>Moukalaba Doudou</i>	<i>22</i>	<i>39</i>
<i>Mwagna</i>	<i>17</i>	<i>21</i>
<i>Monts de Cristal</i>	<i>12</i>	<i>33</i>
<i>Plateaux Bateke</i>	<i>16</i>	<i>33</i>
<i>Pongara</i>	<i>17</i>	<i>23</i>
<i>Wonga Wongue</i>	<i>17</i>	<i>22</i>
<i>Waka</i>	<i>16</i>	<i>20</i>
<i>Total</i>	<i>236</i>	<i>425</i>

(2) Recruit 75 assistant conservation officers

Gabon's national park management plans provide for the organization of personnel into 5 departments to implement protection and management activities:

- Surveillance and Anti-poaching actions (LAB)
- Conservation – research
- Tourism development
- Local communities
- Operations and Development

All these services are essential for elephant conservation and are part of Gabon's National Elephant Action Plan (NEAP). The Surveillance and LAB department covers surveillance activities' organization informed by the surveillance strategy and the data provided by previous patrols to protect elephant populations. It will be supported by the Operations and Development department for equipment and infrastructure management. The Local Communities department will work closely with the people living near national parks to reduce human-elephant conflict (HEC). Tourism development around elephants is essential for the sustainable cohabitation of humans with elephants. The Research Department will support management measures by monitoring the elephant populations and increasing knowledge of their ecology to guide surveillance activities and for HEC mitigation.

These services exist at the headquarters of the ANPN but have not yet been set up in the various parks. Currently, the ANPN has only seven assistant conservation officers for the entire network of national parks. The increase in field staff provided by this project greatly increases the need to recruit qualified department heads to support the Conservation officers in the implementation and monitoring of the various activities.

Specific Terms of Reference (TOR) will be defined for each position. A national call for applications will be made to recruit qualified candidates with a master's degree or equivalent in the various sectors of activity. Additionally, an individual assessment of field staff skills will be carried out to enable some experienced eco-guards to access these positions, after internal validation of their skills and experience.

A total of 75 Assistant Conservation officers will be recruited gradually, at a rate of 15 per year. They will be assigned throughout Gabon's National Parks network, so that each of the 13 parks has at least 5 assistant conservation officers. These numbers will be added to in large parks or priority may be given to certain departments. For example, Surveillance - LAB and Operations - Development will be particularly developed in Minkébé National Park, whilst the focus will be on Tourism in Loango National Park.

The assistant conservation officers assigned to the National Parks will carry out regular field missions to supervise the field staff and to ensure a good knowledge of the terrain and management issues. They will be equipped with complete field equipment.

(3) Organising training for newly recruited personnel

Since the creation of the National Parks in 2002, two trainings sessions were organized by NGOs in 2004 and 2005, and two initial training sessions were organized by the ANPN in 2007 and 2008. Additionally, all eco-guards have completed a military training internship. A training and capacity building program has been set up by the ANPN, in partnership with the British government, for the training of eco-guards and conservation officers. This program received funding from the African Elephant Fund in 2016-2017. Funding secured from the World Bank and the European Union for the recruitment of 80 eco-guards also covers comprehensive training at Lopé in 2017-2018. Nevertheless, the eco-guards recruited by the ANPN between the initial training in 2008 and that of 2017 did not receive theoretical training and were trained in the field.

The recruited staff will receive initial theoretical and practical training. The training and evaluation curriculum developed for previous eco-guards training will be replicated for the training of new recruits. Currently, the ANPN has dedicated centres, located in Lopé, to provide training to its agents: the CEDDAM (Training Centre managed by WCS and based in the Lopé National Park) for the technical and administrative part and the Lopé Military Training Centre, for practical military training.

Two six-week training sessions will be organized at Lopé and cover the following topics:

- Navigation, communication and standardized data collection ;
- Patrol techniques (progression, observation, ambush) ;
- Techniques for arresting offenders and searches;
- Self-defense
- Fire arm maintenance and handling;
- First aid and evacuation plans including bullet wound management;
- Hierarchy, discipline and team spirit;
- Physical exercise and hygiene;
- Relationships with local communities and codes of conduct;

Candidate evaluation will identify future team leaders. They will receive, along with the Assistant Conservation officers, training in the following areas:

- Mission planning
- Forestry legislation
- Intelligence and investigation techniques
- Report writing
- Patrol report writing

The training modules will be delivered by both specialized external trainers and experienced ANPN staff. The external trainers will work closely with the ANPN staff to ensure that the courses provided are tailored to staff needs and the situations encountered in the field. The most experienced eco-guards will work closely with the trainers to pass on their knowledge and experience to new recruits. This will encourage new recruit integration and establish a momentum of on-going training in the field.

Finally, a complete assessment of all eco-guards will be carried out, in order to draw up a personalized training plan and to integrate them into the various training sessions according to their needs. Eco-guards who have not yet received the initial theoretical training will be trained first. The ANPN has already secured funding from the French Development Agency (AFD) to cover the costs of the training for the eco-guards currently employed (60 million CFA francs / year for 4 years).

(4) Evaluate equipment needs for each National Park.

Equipment needs will be carefully evaluated for each National Park:

1. An inventory of the number and condition of all equipment will be undertaken, including navigational and communication (GPS, satellite phones, data collection equipment) instruments and means of transport (4x4 vehicles, quads, motorcycles, canoes and boats);
2. A list of needs will be established for each Park, according to the size of the Park and the means of access means (road, river, lagoon). This list will be based on the needs identified by the management plans and modified in accordance with field staff number increase

Inventory procedures and rigorous equipment maintenance will be put in place, in particular vehicle maintenance and servicing. The ANPN has developed a centralized computer registration system using a single barcode for each piece of equipment. This method will be used to all park offices. This will permit the recording of the entry and exit of each piece of equipment and help with annual audits of equipment condition. Inventory and equipment maintenance will be the responsibility of the conservation officer in charge of operations and development

(5) Provide necessary equipment, including means of transport

The eco-guards and officers recruited by the project will receive a complete personal field kit, including a uniform, a backpack and camping gear. Each National Park will receive the navigation, data logging (GPS) and communication (Thuraya) equipment required for patrols.

Although the forest environment means patrols must be on-foot, teams can be dropped off by road, river, lagoon and air (helicopter). A total of 75 4x4 Toyota Land cruiser vehicles, 50 canoes and boats

will be added to the National Parks' network fleet in order to deploy additional staff on the ground. They will be acquired gradually during the first 5 years of the project.

- (6) Each National Park has a sufficient annual budget to ensure patrol operation and deployment.

An annual budget is established and reviewed each year based on the activities planned in the surveillance strategy for each National Park. The ANPN will continue to cover operational costs related to the activities of current field staff and vehicles. Nevertheless, this project also requires the financing of operational costs related to the deployment of new recruits (per diem during field missions, at a rate of 21 days per month) and the operation of vehicles and other means of transport (insurance, fuel, repairs).

The project provides for the gradual integration of operational costs into the state budget during years 5 to 10 of the project, with the aim that all of these costs will be borne by the Gabonese government at the end of the year 2027. Annual audits will be conducted to ensure good budgetary management in each of the National Parks.

- (7) Deploy the reinforced teams in the field to implement the LAB activities planned in the surveillance strategy

Recruited eco-guards will be deployed in the field at the rate of 21 patrol days per month, in one or more missions depending on the activities and the planned route. The patrol teams will consist of both experienced eco-guards and new recruits, and will also be supported, if necessary, by gendarmes and / or soldiers. A system for collecting patrol and human activity data (SMART) is in place at the ANPN and will be used to monitor the activities carried out.

Increased staffing will allow more field staff to be deployed at the same time, to increase surveillance coverage and allow for a permanent presence in remote sites at strategic locations and in the flagship sites for elephants. such as Langoué Bay in Ivindo National Park.

Actors and other stakeholders:

ANPN, trainers

Timeline (operational plans):

Activity	Sub-activity	Year												
		1				2	3	4	5	6	7	8	9	10
		Q1	Q2	Q3	Q4									
1) Recruit 425 eco-guards	Recruitment	X				X	X	X	X					
	State support									X	X	X	X	X
2) Recruit 75 assistant conservation officers		X				X	X	X	X					
3) Train personnel			X			X	X	X	X					
4) Evaluate equipment needs		X	X											
5) Supply necessary equipment				X		X	X	X	X					
6) ensure an annual operational budget		X				X	X	X	X	X	X	X	X	X
7) Deploy LAB teams				X	X	X	X	X	X	X	X	X	X	X

Targets:

Identified targets for 5 and 10-year markers are:

1. Gabon's 13 national parks have sufficient personnel, equipment and operational budget to implement the surveillance strategy by 2023.
2. The state of Gabon supports the entirety of budget needed for the running of the national parks

Metrics:

Activity	Activity gauge (= indicators of progress)	Results gauge
1) Recruit 425 eco-guards	Number of interviews; number of contracts signed	List of National Park personnel
2) Recruit 75 assistant conservation officers	Number of interviews; number of contracts signed	
3) Train the personnel	Number of training days; number of trained people	

4) Evaluate equipment needs	List of identified equipment	Number of fully equipped National Parks
5) Supply necessary equipment	Equipment procured (GPS, telephones, road equipment), number of cars, canoes, boats.	
6) Assure all is operationally	% necessary budget available	Number of operational National Parks
7) Deploy LAB teams	Number of patrol man-days; number of km covered	Proportion of the territory concerned by the LAB surveillance strategy that is effectively patrolled

Monitoring and evaluation plans:

Targets	Metrics (=progress indicators)	Monitoring methods	Review process
(1) The 13 National Parks of Gabon have sufficient personnel, equipment and operational budget to implement the surveillance strategy by 2023	List of the staff members, number of training sessions, equipment list, patrol efforts.	Internal reports, work program and annual budget, work contracts, tax returns, invoices, database, SMART.	Financial audit

Literature cited:

Maisels F., Strindberg S. et al. 2013. Devastating Decline of Forest Elephants in Central Africa. PLoS One 8, e59469.

Wasser et al. 2015. Genetic assignment of large seizures of elephant ivory reveals Africa's major poaching hotspots. Science 10.1126/science.aaa2457.

Budget :

Year 1 and 2 Budget :

Category	Breakdown	Total (Fcfa)	Year 1		Year 2	
			Needed	ANPN	Needed	ANPN
Personnel						
Eco-guards	Salary 250 000 F salary (+ 35% employer contribution)/ month x 13 months	1 118 812 500	218 657 500	154 280 000	584 055 000	161 820 000
Assistant conservation officers	450 000 F salary (+ 35% employer contribution)/ month x 13 months	355 387 500	118 462 500	0	236 925 000	0
Insurance	300 000 F year per person	90 000 000	30 000 000	0	60 000 000	0
Yearly medical plan	200 000 F/year per person	60 000 000	20 000 000	0	40 000 000	0
Recruitment and training	2 training sessions x 30 000 000 F/session	120 000 000	60 000 000	0	11 280 000	48 720 000
	<i>Total personnel</i>	<i>1 744 200 000</i>	<i>447 120 000</i>	<i>154 280 000</i>	<i>932 260 000</i>	<i>210 540 000</i>
Equipment						
Helicopter	Donated to ANPN	NA	0	NA	0	0
Vehicles	15 vehicles 4x4 Toyota Land cruisers x 27 500 000 Fcfa per vehicle	825 000 000	121 500 000	291 000 000	412 500 000	0
Field Kit	750 000 F/kit (2 uniforms, tents, backpack, shoes, compass, headlamp etc.)	150 000 000	75 000 000	0	75 000 000	0
GPS and thuraya	5 GPS, 2 Thuraya x 13 parks	52 000 000	26 000 000	0	26 000 000	0
Pirogues and engines	5 pirogues x 5 000 000 F/ pirogue	50 000 000	0	25 000 000	0	25 000 000
Boats	5 bateaux x 7 500 000 F/ boat	75 000 000	20 100 000	17 400 000	37 500 000	0
Fire arms	250 000 F/fire arm	50 000 000	25 000 000	0	25 000 000	0
	<i>Total equipment</i>	<i>1 202 000 000</i>	<i>267 600 000</i>	<i>333 400 000</i>	<i>576 000 000</i>	<i>25 000 000</i>
Operational costs						
Running of the vehicles	10 000 000 F/year per vehicle for fuel, insurance, repairs	450 000 000	150 000 000	0	300 000 000	0
Running of the pirogues	7 500 000 F/year for 5 pirogues	112 500 000	37 500 000	0	75 000 000	0
Running of the boats	18 000 000 F/year for 5 boats	270 000 000	90 000 000	0	180 000 000	0
Food in the field	10 000F/day x 250 days/year	750 000 000	250 000 000	0	500 000 000	0
Helicopter	1 000 000 F/hour x 25 hors/month x 12	600 000 000	300 000 000	0	300 000 000	0

	months/year					
	<i>Total operational costs</i>	<i>2 182 500 000</i>	<i>827 500 000</i>	<i>204 160 000</i>	<i>1 355 000 000</i>	<i>234 030 000</i>
	Total	5 128 700 000	1 542 220 000	691 840 000	2 863 260 000	469 570 000
	Overheads (7.5%)	384652500	115666500	51888000	214744500	35217750
	TOTAL	5 513 352 500	1 657 886 500	743 728 000	3 078 004 500	504 787 750

Global budget (10 years) - FCFA

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Personnel	601 400 000	1 142 800 000	1 804 200 000	2 405 600 000	3 007 000 000	2 405 600 000	1 804 200 000	1 202 800 000	601 400 000	300 700 000	15 275 700 000
Equipment	601 000 000	601 000 000	601 000 000	601 000 000	601 000 000	0	0	0	0	0	3 005 000 000
Operational costs	827 500 000	1 355 000 000	2 482 500 000	3 310 000 000	4 137 500 000	3 310 000 000	2 482 500 000	1 655 000 000	827 500 000	413 750 000	20 801 250 000
Admin. costs (7,5%)	152 242 500	232 410 000	366 577 500	473 745 000	580 912 500	428 670 000	321 502 500	214 335 000	107 167 500	53 583 750	2 931 146 250
Total	2 182 142 500	3 331 210 000	5 254 277 500	6 790 345 000	8 326 412 500	6 144 270 000	4 608 202 500	3 072 135 000	1 536 067 500	768 033 750	42 013 096 250
Secured funding	691 840 000	444 570 000	339 300 000	304 530 000	174 000 000	0	0	0	0	0	1 954 240 000
Total needed	1 490 302 500	2 886 640 000	4 914 977 500	6 485 815 000	8 152 412 500	6 144 270 000	4 608 202 500	3 072 135 000	1 536 067 500	768 033 750	40 058 856 250

PROJECT PROPOSAL GA2

Country: Gabon

Lead Institutions: ANPN/DGFAP

Duration of project: 5 years

NEAP Objective, Target & Activities: Objective 3, Targets 3.1 – 3.4 (All Activities)

Title:

Decrease crop depredation by elephants to mitigate human-elephant conflict.

Rationale:

Human elephant conflict (HEC), which is linked to the fragmentation and reduction of available habitat, is increasing in all elephant range countries. The scale of HEC in Gabon stems from a combination of multiple factors, including the near-continuous distribution of elephants across the country, the rapid expansion of extractive industries - especially forestry, and high poaching pressure in remote forest havens, pushing the elephants nearer to villages. In a context where demographic changes have weakened aging rural populations, years of government inaction have contributed to making HEC a highly emotional problem, to the point where public opinion could stand against elephant conservation. Strong and immediate action is needed to alleviate this conflict and regain public support for the protection of the last remaining forest elephant havens.

Many methods have been tried to solve HEC in African countries (IUCN, 2001). Several complementary approaches are needed to mitigate HEC, including (1) crop protection, (2) adapting agricultural practices, (3) compensation for losses to farmers, (4) knowledge of elephant ecology, and (5) in extreme cases, elimination of problem animals.

The project will focus on protecting crops from elephant depredation, to obtain rapid HEC abatement in Gabon. The FAO has proposed a toolkit (FAO 2014), which is a very comprehensive academic approach, but has been of little use in the field. The activities developed in Gabon will build on the experience and lessons learned in other countries, while adapting them to the Gabonese forestry context and agricultural practices. The project will draw on the experience from Laikipia in Kenya, which has shown that only electric barriers offer a suitable solution in areas of frequent HEC. The project proposes to install 500 electric barriers across Gabon in the most affected communities.

This approach will be completed with better monitoring of crop depredation by elephants, in order to measure the actual extent of damage. Complementary measures such as the training of a veterinary field team to manage sensitive cases, the study of insurance and compensation opportunities, and the study of agricultural practices, will also be implemented.

Objective:

The objective of this project is to reduce human-elephant conflict (HEC) to an acceptable level for rural populations in Gabon, by improving knowledge about the impact of elephants on agricultural production and implementing solutions, which are effective in protecting crops.

Expected outcomes:

The expected results over the next 5 years are the following:

- Each of Gabon's 9 provinces have a qualified team to handle HEC Issues;
- 500 electric barriers are installed across the country;
- Rural populations know the complaint procedure;
- The implementation of the state compensation plan is made easier by a standardized procedure for data collection and damage evaluation;
- A field veterinary team is created to manage the most sensitive cases.

Relationship to the AEAP, any NIAP and the EPI:

1) Relationship to the AEAP

This project is in line with the objectives and strategies of the African Elephant Action Plan (AEAP), in particular the following activities: Objective 3: Resolve Human-Elephant Conflicts, Strategy 3.1: Apply adaptive management approaches to address human-elephant conflict mitigation by focusing on building the capacity of managers and local communities. Activities: 3.1.1, 3.1.2, 3.1.3 & 3.2.1.

2) Relationship to the NIAP

This project is in synergy with the priority measure F8: Establish a human-wildlife conflict management unit.

3) Relationship to the EPI

Gabon is one of the founding countries of the Elephant Protection Initiative (EPI). This project is part of its National Elephant Action Plan (NEAP), developed as part of the EPI with the support of Stop Ivory. This project will contribute directly to the implementation of the AEAP, which is the main purpose of the EPI.

Actions/activities, methods, actors and timelines:

Actions/activities

This project is part of the third strategic objective of Gabon's NEAP, in particular the following Targets:

- 3.1 The specialized unit in charge of human-elephant conflict in Gabon (UHE) is operational;
- 3.2 Guidelines for mitigation of crop depredation by elephants are available;
- 3.3 Local people actively participate in HEC management;
- 3.4 Simple and effective procedures are in place for conflict and damage reporting;
- 3.5 A monitoring mechanism for HEC is put in place.

The activities necessary to achieve the objectives are the following (with reference to the activities in Gabon's NEAP):

- 1) Recruit and train decentralized HEC teams (measure 3.1.1)
- 2) Set up a HEC reporting and monitoring system (measures 3.4.1, 3.4.2, 3.4.4 and 3.5.1)
- 3) Install barriers in the affected communities to protect crops (measures 3.3.2 and 3.3.4)
- 4) Recruit and train community eco-guards (measure 3.3.1)
- 5) Make the complaint and compensation procedures easy to understand (measures 3.3.2 and 3.3.3)
- 6) Assemble a field veterinary team

Methods

1. Recruit and train decentralized HEC teams

The unit in charge of human-wildlife conflicts (CHF), in particular HEC at the ANPN, is made up of 3 officers, based in Libreville, Tchibanga and Makokou. This unit is devoid of equipment and vehicles, which considerably limits its capacity and scope. The provincial Department of Water and Forests (DP) have a Hunting and Wildlife Service, but do not have agents specifically in charge of the management of CHF.

The project will set up joint ANPN-DGFAP HEC teams in Gabon's 9 provinces. Each national park will have a head of the local community department in charge of HEC management in the buffer zone of the national park. Technical officers will be assigned to each province to form a qualified and operational HEC team. In total, a staff of 45 will be recruited, including 13 department heads in the national parks and 32 technical agents. Two postdoctoral project coordinators will be recruited to oversee the project at the national level, set up the HEC database and develop protocols for reporting and assessing damage.

HEC staff will be trained to have a good understanding of the problem, in conflict management with villagers, in data collection, in report writing and in barrier construction. HEC is an issue that is repeatedly addressed by villagers. Field workers lack training and guidelines to deal with the highly emotional attitudes of local communities and defuse conflict. The support of internationally recognized experts, who organize this type of training, will be solicited (IUCN, NGOs).

HEC teams will conduct regular field missions and as such, will receive a field kit (tent, uniforms, backpacks, field shoes, compass, flashlight ... etc). Each provincial team will have a Toyota Land cruiser 4x4 vehicle to move between villages, as well as monitoring equipment for data collection (GPS, camera traps). The project will also need to cover the operational costs for team deployment in the field (per diem during field missions, at a rate of 21 days per month) and the vehicle running costs (insurance, fuel, repairs).

2. Set up a HEC reporting and monitoring system

Knowledge on the extent of HEC comes from studies carried out using questionnaires (Lahm 1996, Walker 2010) or field observations in a localized area (Fairet 2012). Although the DGFAP receives information from some regional offices, there is currently no national database of HEC cases, nor is there a standardized procedure for reporting crop damage.

A system of standardized HEC reporting and monitoring at the national level is essential for:

1. Evaluating the extent of economic losses, property damage, the number of injuries or deaths, and the number of elephants killed at the national level;
2. Understanding, at the local level, the frequency and seasonal variations of crop depredation by elephants;
3. Identifying priority areas requiring barrier construction;

4. Measuring the effectiveness of the implemented crop protection measures;
5. Supporting the State in implementing a compensation mechanism for farmers who have suffered losses due to elephants.

A standardized protocol for monitoring HEC will be developed for ANPN and DGFAP teams, including cases of crop depredation, property damage, injury or death, elephant slaughter. A computerized system for collecting and transmitting data to a central database will be set up. HEC team officers will be trained to apply the protocol.

Studies are needed to identify farming practices that promote HEC. Field fragmentation, their distance from the villages, their proximity to forested areas, in particular key attraction points for elephants (swamps, fruit trees) are major risk factors (Lahm 1996, Fairet 2012). The data collected will be analyzed annually at the national level, but also at the provincial level, in order to monitor the evolution of HEC and improve the understanding of HEC mechanisms. The two project coordinators will be supported by Stirling University, which has established a partnership with the ANPN for understanding HEC.

3. Install barriers in the affected communities to protect crops.

Several types of barriers have been tested in Gabon to block access to fields by elephants, including barrier installation (electric or straps), the creation of ditches, repellent use (bees, chili peppers) (Ngama et al., 2016). Experience has shown that barriers (electric or strap-type) are the only effective techniques. The project will install the most appropriate barrier type for each situation (population size, field size, elephant density, average age of the human population ... etc.).

- Electric barrier installation

Since August 2015, the ANPN has committed to the 'Fils et Faune' project by installing 3 electric barriers- inspired by techniques used in Kenya and Sri Lanka - around plantations in Lopé and in villages near Makokou. The area thus protected in the village of Kazamabika (Lopé) (53 ha) offers sufficient space for 8 families' plantations. It benefited from the support of the NGO 'Space for Giants' for the installation of these electric barriers. A team of technicians has been trained in barrier installation and maintenance by the NGO 'Space for Giants'. Funding has been secured for about 20 barriers and the first tests are satisfactory.

The project will encourage crop regrouping by several families, so as to install one electric fence for one or more villages. Due to the complexity of their installation, these barriers are not adapted to crop rotation. They require a settlement of crops in one location and to include areas to lay fallow.

This project involves the purchase and installation of 500 electric barriers to protect plantations located around the parks and in identified priority areas (Activity 2). The HEC team will be trained in their installation, while maintenance will be provided by local people assisted by community eco-guards.

- Strap type barrier installation

Since 2015, the ANPN HEC cell has been testing a barrier consisting of straps. This barrier was originally developed by researchers at Duke University.

The ANPN successfully tested the installation of barriers made from lash/securing straps, developed by researchers at Duke University (Poulsen lab) in the Ipassa research site to fence off exclusion zones for monitoring vegetation. This type of barrier requires strong trees to create tension in the straps. It is adapted to the forest environment, provided certain trees are kept after felling for field preparation. Thanks to the simplicity of their installation, these barriers can be moved by farmers, which is suitable for rotation crops. Maintenance is minimal. However, this technique is better adapted to small fields.

- Modification of agricultural practices

Gabonese people have traditionally practiced slash-and-burn agriculture, which consists of clearing a plot of land and then burning its vegetation. New fields are created after a few years because of soil depletion. These practices make it difficult to put in place sustainable and collective protection measures. Furthermore, with farmers clearing their fields in the middle of the forest, they increase the forest-crop interface and the risk of HEC. The establishment of protective barriers around the fields is inseparable from the modification of agricultural practices.

Collaboration will be initiated with the Gabonese Institute for Development Support (IGAD) to inspire and train farmers to adopt innovative farming techniques, which will optimize and encourage the long-term use of farmed plots, to settle the crops in one location and rally the farmers together. Increasing agricultural productivity could also offset losses to an acceptable level. IGAD will also help to identify the agricultural practices that most reduce the risk of crop depredation by elephants. The project will study, among other things, the feasibility of zoning agricultural sites to avoid and / or reinforce the protection of high-risk areas (proximity to protected areas, main elephant trails).

This activity is on a local scale. Although not the subject of this project proposal, land use planning, with a clear delimitation of the areas assigned to agriculture, is essential at the national level.

4. Recruit and train community eco-guards

The direct involvement of local communities in HEC management is essential. It is essential that the electrical barriers be watched and maintained to avoid intrusions.

Community eco-guards will be recruited locally, in the villages concerned by HEC. They will be trained in installation and maintenance and will work closely with farmers to help them change their farming habits so as to follow guidelines and get organized to set up community barriers. These eco-guards will also support farmers in the inspection and maintenance of electrical barriers.

5. Make the complaint and compensation procedures easy to understand

The national CHF management strategy provides for a compensation plan for crop damage by elephants. The law currently only offers a compensation scheme for deliberate damage to crops. A review of the forestry code is under way and will fill this legal void by including state compensation after investigation for damage caused by wild animals. The compensation plan's effective implementation requires the development of standardized procedures for receiving complaints and making degradation reports. Understanding the extent of elephant damage better will help to plan an adequate annual budget and assess a complementary private insurance system's feasibility.

Complaints are currently collected by multiple institutions (provincial departments, national parks, prefecture), making follow-up difficult. Furthermore, complaint procedures are inconvenient and taxing for affected farmers (Fairet 2012). The ANPN and / or DGFAP teams will go to the scene to quickly make a report in cases of personal injury or death or of the slaughter of an elephant, as is allowed by law in cases of self-defense. However, it is not realistic to send a team to collect complaints and make a report in each event of crop depredation. The project will study the feasibility of streamlining procedures through a rapid complaint filing system, for example by SMS, associated with regular damage verification missions.

The project will produce and publicize guidelines on complaint and report writing procedures for wildlife managers, other affected institutions and local communities. These guidelines will be presented and explained to stakeholders and validated during Local Management Consultative Committee (CCGL) meetings.

6. Assemble a field veterinary team

Reported cases of elephants wounded by bullets or cable traps have been increasing in recent years. The ANPN needs a veterinary field team ready to intervene quickly to treat the HEC elephant victims, but also to remove the problematic elephants, or even shoot them in extreme cases. Several studies have shown that, in the case of elephants, it is not effective to kill an elephant that regularly devastates crops, because it will be immediately replaced by a new dominant elephant (Chiyo et al., 2011). This measure should be considered only in the face of serious danger or if in need of immediately appeasing the most serious conflicts (loss of human life in particular).

A veterinarian experienced in the capture of wild animals will be recruited and associated with two Gabonese veterinarians to develop local capacities. The two Gabonese veterinarians will get specialized training in capturing large African wildlife in Zimbabwe to learn how to handle and dose powerful anesthetics and how to safely capture elephants.

The intervention team will be reinforced by professional shooters. Since 2015, the ANPN has been testing an innovative technique to repel elephants, using chilli cartridges. This method is for areas which are only exceptionally entered by groups of elephants, in particular urban areas. Many hunters turn to poaching because available jobs are lacking. The project plans to recruit former poachers for crop protection and, indirectly, elephants.

Actors and other stakeholders

ANPN, DGFAP, IGAD, partner NGOs.

Timelines (operational plans)

Activity	Sub-activity	Years				
		1	2	3	4	5
Recruit and train decentralized HEC teams		X				
Set up a HEC reporting and monitoring system		X				
Install barriers in the affected communities to protect crops	<i>Install barriers (100 per year)</i>	X	X	X	X	X
	<i>Collaboration with l'IGAD</i>		X	X		
Recruit and train community eco-guards		X				
Make the complaint and compensation procedures easy to understand			X	X		
Assemble a field veterinary team		X				

Targets:

The identified targets over 5 and 10 years are the following:

- (1) Crop depredation is at level acceptable to rural communities;
- (2) Knowledge about crop depredation by elephants in Gabon is increased;
- (3) The number of elephants killed legally has decreased;
- (4) A veterinary team is operational and in the field by 2023;
- (5) The attitude of rural community members towards elephants has evolved in a positive way.

Metrics:

Activity	Activity gauge	Results gauge
1) Recruit and train decentralized HEC teams	Number of signed contracts, number of vehicles bought, number of training days, number of mission man-days.	Proportion complaints followed by reports
2) Set up a HEC reporting and monitoring system	Number of reports in the national database.	
3) Install barriers in the affected communities to protect crops	Number of barriers built, area of crops protected, and number of farmers involved.	Proportion protected priority zones
4) Recruit and train community eco-guards	Number of contracts signed.	
5) Make the complaint and compensation procedures easy to understand	Number of complaints received, number of field officers trained.	Proportion incidents ending with a full filed complaint
6) Assemble a field veterinary team	Number of contracts signed, list of equipment and products bought, number of intervention reports.	Proportion of reported cases on which the team intervened.

Monitoring and assessment plan:

Targets	Metrics (=indicators of progress)	Monitoring method(s)	Review process
Crop depredation is at a level acceptable to rural communities	Number of reports in the national database, proportion of damaged crops.		Satisfaction surveys
Knowledge about crop depredation by elephants in Gabon is increased	Number of reports in the national database, number of technical reports.		Number of peer-reviewed scientific publications
The number of elephant slaughters has decreased	Number of elephants slaughtered in plantations.	Provincial departments' and parks' registers	
A veterinary team is operational and in the field by 2023	Number of interventions		
Rural communities' feelings towards elephants have evolved in a positive way	Number of farmers concerned by the barriers		Satisfaction surveys

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Budget:

Category	Breakdown	Year1	Year 2	Year 3	Year 4	Year 5
Personnel						
2 coordinators	Salary 2 400 000 Fcfa/month (employer contribution included) x 2 persons	62 400 000	62 400 000	62 400 000	62 400 000	62 400 000
HEC teams	25 persons x (450 000 F salary + 35% employer contributions)/ month	197 437 500	197 437 500	197 437 500	197 437 500	197 437 500
Community eco-guards	90 eco-guards x (250 000 F salary + 35% employer contributions)/ month	197 437 500	394 875 000	394 875 000	394 875 000	394 875 000
Insurance	300 000 F/year pour 90 eco-guards + HEC teams	35 100 000	35 100 000	35 100 000	35 100 000	35 100 000
Yearly medical plan	200 000 F/year pour 90 eco-guards +HEC teams	23 400 000	23 400 000	23 400 000	23 400 000	23 400 000
Recruitment and training	1 training session x 10 000 000 F/session	10 000 000	10 000 000	0	0	0
Equipment						
Vehicles bought	9 vehicles 4x4 Toyota Land cruiser x 27 500 000 F/vehicle	247 500 000	0	0	0	0
Electric barriers	17 000 000 Fcfa/barrier x 100 barrier per year	1 700 000 000	1 700 000 000	1 700 000 000	1 700 000 000	1 700 000 000
Strap barriers	Lashing straps with ratchet tensioner 1 650 000 Fcfa/km x 100 km per year	165 000 000	165 000 000	165 000 000	165 000 000	165 000 000
Field kit	750 000 F/kit (2 uniforms, tent, backpack, shoes, compass, headlamp etc.) for 45 eco-guards + HEC team	87 750 000	0	0	0	0
Data collection	Tablets, GPS x 9 kits	12 397 587	0	0	0	0
Operational costs						
Vehicle running	Insurance, fuel, repairs 10 000 000 Fcfa/an	90 000 000	90 000 000	90 000 000	90 000 000	90 000 000
Field Mission costs	10000 F/day x 250 days/year for45 eco-guards+ HEC team	180 000 000	180 000 000	180 000 000	180 000 000	180 000 000
Communication	Organization of meetings (CCGL) +simplification materials	0	20 000 000	20 000 000	0	0
Field veterinary unit						
1 International veterinary	Salary 4 000 000 Fcfa/month (employer contribution included) x 1 person	52 000 000	52 000 000	52 000 000	52 000 000	52 000 000
2 Gabonese veterinary	Salaries 2 400 000 Fcfa/month (employer contribution included) x 2 persons	62 400 000	62 400 000	62 400 000	62 400 000	62 400 000
5 shooters	5 shooters x (250 000 F salary + 35% employer contribution) / month x 13 months	21 937 500	21 937 500	21 937 500	21 937 500	21 937 500
Field kits	750 000 F/kit (2 uniforms, tent, backpack, shoes, compass, headlamp etc.)	6 000 000	0	0	0	0

Veterinary equipment	Gun, small gear, veterinary equipment	10 800 000	2 700 000	2 700 000	2 700 000	2 700 000
Guns and ammunition	Gun, cartridges (chili pepper and lethal)	27 000 000	7 000 000	7 000 000	7 000 000	7 000 000
vehicle	1x Toyota Land cruiser 27 500 000 Fcfa	27 500 000	0	0	0	0
Vehicle running	Insurance, fuel, repairs 10 000 000 Fcfa/year	10 000 000	10 000 000	10 000 000	10 000 000	10 000 000
Field mission costs	10000 F/day x 250 days/year for 3 veterinaries and 5 shooters	20 000 000	20 000 000	20 000 000	20 000 000	20 000 000
Training	Zimbabwe training in Large African wildlife capture	10 000 000	0	0	0	0
	Total	3 256 060 087	3 054 250 000	3 044 250 000	3 024 250 000	3 024 250 000
	Overheads (7,5%)	244 204 507	229 068 750	228 318 750	226 818 750	226 818 750
	TOTAL	3 500 264 594	3 283 318 750	3 272 568 750	3 251 068 750	3 251 068 750
	Total (5 years)	16 558 289 594				
	Secured funding	1 053 000 391				
	Sought	15 505 289 203				

PROJECT PROPOSAL GA3

Country: Gabon

Lead Institution: ANPN

Duration of project: 5 years

NEAP Objective & Actions: Objective 7, Action 7.1.5

Title:

New tourism destinations launched in Gabon's National Parks

Rationale:

Long-term elephant conservation will only be possible with the full commitment and support of the people of Gabon. In addition to active human-elephant conflict management, this requires creating jobs and incomes for people living near elephants. The value of a 'big tusker', when tourism has been developed in Langoué bay, will be ten times higher than that of the sale of its ivory. At present though, unfortunately, local people only know the value of a dead elephant.

The network of 13 National Parks in Gabon, created in 2003, offers a number of diverse tourist trails organized around different landscapes and mega fauna observation. Future tourists will have the chance to observe forest elephants in a unique setting, in particular on the Atlantic beaches or alongside gorillas in the baïs.

In line with the "presidential vision", the objective of this project is to support the tourism industry in pioneering new investments to make Gabon a recognized tourist destination. The launching of tourist activities in the National Parks is crucial for tourist product endorsement and the development of quality hospitality capacity.

Objective:

The objective of this project is to develop the infrastructure and the quality hospitality sector needed to accommodate 10,000 tourists a year in the National Parks of Gabon.

Expected outcomes:

The expected results of the project over the next 5 years are:

- 1) Ten quality eco-tourism structures established in Gabon's National Parks,
- 2) Availability of well trained staff for guiding and hospitality,
- 3) Gabon has an international reputation as an attractive new tropical tourist destination offering a unique nature show.

The expected results of the project over the next 10 years are:

- 4) Gabon becomes a major destination for high-end tourism,

- 5) Local communities benefit directly from tourism and fully support elephant conservation,
- 6) Tourism is a sector providing stable jobs.

Relationship to the AEAP, any NIAP, and the EPI:

1) Relationship with the AEAP

This project meets Objectives 4 and 7 of the African Elephant Action Plan (AEAP), including Activity 7.1.5. It is crucial for the sustainability and long-term success of the NEAP, because the Gabonese people will only support elephant conservation when they see direct benefits to their existence.

2) Relationship with the EPI

Gabon is one of the founding countries of the Elephant Protection Initiative (EPI). This project is part of the National Elephant Action Plan (NEAP), developed within the framework of the EPI, with the support of Stop Ivory. This project will thus directly contribute to the AEAP implementation.

Actions/activities, methods, actors, and timelines:

Actions/activities

This project is part of Gabon's NEAP objective 7, in particular targets 7.1 & 7.2. The activities necessary to achieve the objectives planned over the next five years are the following (with reference to the activities included in the Gabon NEAP):

- Identify tourist circuits and products which define the identity of each Park
- Prepare the tourist sites and access roads
- Recruit and train eco-guides
- Recruit and train hospitality staff
- Build 8 ecotourism structures in selected National Parks
- Set up evacuation and security procedures in remote sites
- Implement a communication campaign to unveil Gabon as a new tourist destination
- Welcome tourists at a rate of up to 1000 people per year per structure

Methods

- 1) Identify tourist circuits and products which define the identity of each Park.

The choice of tourism products will be centred on mega fauna and will follow recommendations of the National Parks' management plans. Since observation is difficult in the Forest environment, existing scientific data will be compiled to identify the best areas and the seasonal variations in the distribution of certain species, including forest elephants. Transmitter collars will also be used to locate certain species and increase the chances of sightings.

The sighting of an elephant in the forest is very different from with the savannah elephant. The search for an elephant is as interesting for a tourist as the sighting itself, if the circuit is well prepared to captivate interest. A botanical component will be integrated into all tours to enrich wildlife viewing excursions.

- 2) Prepare the tourist sites and access roads

The National Parks of Gabon are located in remote areas and are difficult to access or not accessible by vehicle. It will be necessary to develop access routes to selected ecotourism sites for them to be easily reachable by 4x4 vehicle or quad.

Similarly, progress in the forest is difficult and trails will have to be cleared to allow the passage of groups of trekkers/walkers. Clearing the trails will also facilitate observation of the animals. Platforms will be built in open areas which have high concentrations of animals (bays, beaches) to facilitate safe prolonged observation.

3) Recruit and train eco-guides

The Wildlife Conservation Society developed a training curriculum in eco-tourism guiding in 2013/2014. A first training session was held at CEDAMM (Complexe Educatif Dr. Alphonse Mackanga Missandzou/ Educational complex) at Lopé. A new three-month training session will be organized to train additional eco-guides. A total of 30 eco-guides (three per camp) will be recruited and trained. The initial session will be reinforced by three one-month specialization training sessions for three years.

4) Recruit and train hospitality staff

Service quality in the camps has a major influence on visitor satisfaction levels during their stay. The hospitality sector is underdeveloped in Gabon. The launch of a high-end tourist activity implies having qualified staff able to welcome visitors professionally. The "Green Gabon" objective is that at least 80% of the jobs created by the tourism sector will be held by Gabonese people. To achieve this goal, it is crucial to invest in hotel staff training.

A total of 30 people (three per camp) will be recruited and trained for several months in all aspects of the hospitality business. The initial training will be reinforced by three one-month specialization training sessions for three years and regular on-site inspection visits to ensure the quality of service. This activity will support the development of a first-rate hospitality sector and will thus be a first step towards reaching the capacity level necessary for the operation of a high-end lodge.

5) Build 8 ecotourism structures in selected National Parks.

This project will develop ecotourism structures in 8 sites selected for the richness of their fauna, their distinctiveness and their unique setting; these attributes constitute their ecotourism identity and attractiveness. Additionally, these sites were chosen to offer a range of different products to create rich and varied tourist trails and circuits. A pilot camp built has been built in Loango National Park at Camp Louri. It will be used as a testing ground and the approach, once approved, will be duplicated in the other 8 sites.

The selected sites are:

- The Langoué baï: a vast world-famous glade offering almost guaranteed sightings of 'big tusked' alongside gorillas and sitatungas;
- Lastoursville baïs: smaller glades, which provide close-up diurnal and nocturnal gorilla sightings, as well as the presence of very large groups of elephants during most of the year;
- Pongara National Park: beaches only 30 minutes from the capital, where you might find forest elephants, but also leatherback turtles during half of the year;

- Loango National Park- Camp Louri: white sand beaches interspersed with lagoons, visited by large forest elephant groups, close to sites where encounters with habituated gorillas and chimpanzees are probable;
- Loango National Park - Akaka: A unique site attracting elephants in the dry season and offering close-up sightings from a boat travelling between the swamps;
- Lopé National Park: forest and savannah patchwork landscape offering trails accessible by car or by foot, as well as sightings of large group of mandrills;
- Ivindo National Park – Djidji river: river with waterfalls, sightings of elephants, crocodiles, great apes;
- Mwagna National Park: a network of bai often visited by elephants in the heart of dense forest for the more adventurous traveller;
- Batéké Plateaux National Park: unique savannah landscapes and elephant viewing platforms overlooking the salt marshes created by the Mpassa River.

In line with the "Green Gabon" vision, ecotourism structures will meet a number of specifications including local sourcing (food and building materials), waste management, respect for fauna and flora, water management and the use of renewable energies. The camp accommodation will consist of tents designed to provide mid-range comfort to promote site visits in order to speed up the construction of high-end lodges, whilst keeping the long-term vision of also targeting mid-range and local tourism.

6) Set up evacuation and security procedures in remote sites

Since the selected tourist sites are located in remote and inaccessible areas, evacuation and security procedures will have to be defined, tested and approved in order to react quickly in the event of an accident involving wildlife or any other visitor health problem. All camp staff will be trained in first aid. These procedures will comply with international standards.

7) Implement a communication campaign to unveil Gabon as a new tourism destination

Three experienced professional photographers will be sent to the 10 tourist sites to produce high-resolution photographs and films. In addition, a photographer will be recruited for each National Park to ensure a permanent presence. Finally, five production units consisting of three people will be recruited, equipped with professional equipment and sent off to the various sites.

This image bank will be made available to investors for producing brochures and short films to promote Gabon as a destination to the general public. It will also supply images for a website presenting the National Parks. Posters and short films will be shown at airports and on airlines to promote Gabon as a new tourist destination.

8) Welcome tourists at a rate of up to 1000 people per year per structure

At first, tourists will be welcomed at a slow pace, with groups of less than ten people. This will allow checking and approval of the proposed tourism products, to put in place efficient stock management, to ensure the proper running of the site and to evaluate the recruited staff. The proposed capacity will be progressively increased up to 1000 visitors per site per year within 5 years, in synergy with the communication campaign to increase demand.

Actors and other stakeholders

ANPN, Ministry of tourism, WCS (eco-guides training), tourism professionals.

Timelines

Activity	Sub-activity	Year				
		1	2	3	4	5
1) Select the tourism products and circuits that represent each Park		X				
2) Prepare the tourist sites and access roads		X	X			
3) Recruit and train eco-guides	<i>Initial training</i>	X				
	<i>On-going training</i>		X	X	X	
4) Recruit and train the hospitality staff		X	X			
5) Build ten ecotourism structures in the selected National Parks.		X				
6) Set up evacuation and security procedures in remote sites.		X				
7) Implement a communication campaign to unveil Gabon as the new tourism destination.		X	X	X	X	X
8) Welcome tourists up to a rate of 1000 people per year per site			X	X	X	X

Targets:

The targets for the next 5 and 10 years are the following:

- (1) By 2023, Gabon is considered an attractive tropical forest tourist destination, offering unique mega fauna sightings;
- (2) By 2019, Pioneer investors encourage private sector investment for the construction of luxury lodges;
- (3) By 2023, the National Parks, the investors and the tourists all contribute to an increase in quality of life for the communities living near the National Parks;
- (4) By 2028, the People of Gabon support elephant conservation.

Metrics:

Activity	Activity gauge	Results gauge
1) Select tourism circuits and products representing the identity of each Park.	Number of reconnaissance missions in the field; number of trails mapped out; number of products selected	
2) Prepare the tourist sites and access roads	Number of built platforms, map of access roads and open forest trails, number of man-days of	Number of satisfied tourist after their stay in one of the National Parks

	preparation	
3) Recruit and train eco-guides	Number of work contracts signed; number of training days and people trained.	
4) Recruit and train hospitality staff	Number of work contracts signed; number of training days and people trained.	
5) Build ten ecotourism structures in the selected National Parks.	Number of structures build; number of equipped buildings	Number of functioning structures
6) Set up evacuation and security procedures in remote sites.		
7) Implement a communication campaign to unveil Gabon as the new tourism destination.	Number of communication products developed; number of video showings; number of brochures distributed	Number of travel agents and tour operators offering Gabon as a tourism destination
8) Welcome tourists at a rate of up to 1000 people per year per site	Number of visitors per site per year	Target proportion of the welcoming capacity attained.

Monitoring and evaluation plans:

Target(s)	Metrics
Gabon is considered an attractive tropical forest tourist destination	Surveys to foreign consumers, number of tour operators offering Gabon as a destination
Pioneer investors encourage private sector investment for the construction of the luxury lodges	Number of state- private partnerships made, number of lodges built.
The National Parks, the investors and the tourists all contribute to an increase in quality of life for the communities living near the National Parks	Financial benefits received by local population, number of jobs
The People of Gabon support elephant conservation	Satisfaction survey, number of domestic visitors

Budget:

Categories	Breakdown	Year1	Year 2	Years 3-4-5
Personnel				
Eco-guides and baïs observers	Salary 650 000 Fcfa/ month (expenses & insurance included) x 5 people per camp for 8 camps for 5 years	412 000 000	412 000 000	1 236 000 000
Camp personnel	Salary 650 000 Fcfa/ month (expenses & insurance included) x 3 people per camp for 8 camps for 5 years	247 200 000	247 200 000	741 600 000
Video production unit	Salary 650 000 Fcfa/ month (expenses & insurance included) x 15 people for 5 years	132 000 000	132 000 000	396 000 000
Photographers assigned to each National Park	Salary 650 000 Fcfa/ month (expenses & insurance included) x 13 people for 5 years	101 400 000	101 400 000	304 200 000
Professional Photographers	Support for 3 international photographers per year	90 000 000	90 000 000	270 000 000
Transport				
Relationship with investors	Promotion trips, International travel fairs	250 000 000	250 000 000	750 000 000
Training				
Initial training eco-guides	3 month training session	100 000 000	0	0
On-going training eco-guides	3 x one-month training sessions	0	34 000 000	68 000 000
Infrastructure & Equipment				
Construction and equipment of the ecotourism structures	8 ecotourism structures x 150 000 000 Fcfa per structure (including camp, 3 Polaris, field and communication equipment, 1 vehicle Toyota)	1 200 000 000	0	0
Photographic equipment	15 000 000 Fcfa for each National Park	195 000 000	0	0
Production unit equipment	Purchased equipment estimated at 45 000 000 Fcfa per unit	225 000 000	0	0
Professional Cameras	One camera purchased for each production unit	160 000 000	0	0
Development of the tourism products	Renovation of access roads and sighting platforms x 8 sites	680 000 000	0	0
Operational Costs				
ANPN staff food	Per diem 10 000 Fcfa/day x 275 days per year x 36 people per camp	246 000 000	246 000 000	738 000 000
Website	Yearly cost estimate at 50 000 000 Fcfa	50 000 000	50 000 000	150 000 000
Total		4 088 600 000	1 562 600 000	4 653 800 000
Operating costs (7,5%)		306 645 000	117 195 000	349 035 000
Total yearly		4 395 245 000	1 679 795 000	5 002 835 000
Total for 5 years		11 077 875 000		

PROJECT PROPOSAL GA4

Country: Gabon

Lead Institution: ANPN (Partners: WCS/WWF/Panthera)

Duration of Project: 10 years

NEAP Objective, Targets & Activities: Objective 5, Targets 5.1 – 5.5 (All Activities)

Title:

Inventory and monitoring of Gabon's elephant populations

Rationale:

Reliable and accurate data on population size, distribution and trends is essential to guide elephant conservation plans. Despite a decline in global numbers of over 60% in ten years, Gabon is home to about half of all forest elephants (Maisels *et al.*, 2013). With very strong poaching pressure in the North-East of the country, it is essential to monitor population size variations.

In the past, elephant surveys have been insufficiently coordinated and archived in Gabon (for a review, see Maisels & Strindberg 2012, Maisels *et al.*, 2013). The last national survey dates back nearly 30 years (Barnes *et al.*, 1995). Furthermore, the results have not always served the conservation cause. Thus, the two inventories conducted in Minkébé in 2004 and 2014 showed much too late an estimated loss of between 16,000 and 25,000 elephants (ANPN 2013, Poulsen *et al* 2017). These figures of more than 2,000 elephants slaughtered per year have shown that it is crucial to set up far more regular and targeted follow-up surveys to detect any population decline before reaching a crisis situation.

The ANPN needs reliable and accurate methods to know the status of elephant populations, but also to measure early indicators of changes in numbers. The project plans to draw on existing experience and technical expertise in Gabon, by creating a consortium between the National Agency of National Parks (ANPN), the Wildlife Conservation Society (WCS), the World Wildlife Fund (WWF) and Panthera, to coordinate and guide elephant research and monitoring. Moreover, it will build on the results of several ongoing studies, in partnership with the ANPN, which will establish baseline data for population monitoring and identify the most appropriate approaches to improve population monitoring effectiveness and responsiveness to conservation issues.

Surveys and monitoring will not only concern national parks but also priority conservation areas, including national parks and adjacent areas required for elephant conservation. They will also be used for identifying and monitoring corridors between national parks.

Objective:

Implement regular monitoring of elephant populations in Gabon, based on a combination of reliable and effective methods, adapted to each landscape, to detect any variation early.

Expected outcomes:

The expected outcomes are following:

- (1) Status of main elephant populations in Gabon is known;
- (2) A scientific unit able to survey and monitor elephant populations has been formed;
- (3) A survey methodology and effective and suitable monitoring approach are identified for each priority elephant population;
- (4) Population trends of the main elephant populations are regularly monitored;
- (5) Management authorities receive early warning in the case of population decline;
- (6) A limited integrated database is available for stakeholders.

Relationship to the AEAP, any NIAP and the EPI:

1) Relationship to the AEAP

This project meets priority objective 5 of the AEAP including strategies 5.1 and 5.2:

2) Relationship to the EPI

Gabon is one of the founding countries of the Elephant Protection Initiative (EPI). This project is part of the National Elephant Action Plan (NEAP), developed in the framework of the EPI, with the support of Stop Ivory. This project will thus directly contribute to the objective of implementing the AEAP.

Actions/activities, methods, actors and timeline:

Actions/activities

This project is in line with Objective 5 of Gabon's NEAP, in particular targets 5.1: The national natural resource monitoring database is up-to-date and 5.4: Research makes it possible to evaluate the effectiveness of conservation actions.

The activities needed to achieve the objectives are as follows (with reference to activities in Gabon's NEAP):

- 1) Build a consortium for elephant population monitoring (activity 5.2.1)
- 2) Compile the existing databases (activity 5.1.3)
- 3) Identify the main population blocks
- 4) Test, compare and identify the most trustworthy and suitable methodologies for each landscape and management needs (activity 5.4.1)
- 5) Update Gabon's national elephant database (activity 5.1.1)
- 6) Establish a regular elephant population monitoring program (activity 5.4.2)

- 7) Assemble and send out a team responsible for elephant population monitoring (activity 5.4.2)
- 8) Put in place a mechanism for processing and quickly transferring data to managers (activity 5.3.2)

Methods

Build a consortium for elephant population monitoring

A consortium will be created to mobilize the human resources, skills and technical expertise of the various actors with long term involvement in elephant study and conservation in Gabon. The ANPN and WCS signed a collaboration agreement in 2017 to test different survey methods in three pilot sites in Gabon. WWF has been involved in wildlife surveys in Gabon since 2001. Panthera has been providing technical support to the ANPN for camera trap studies of large mammals since 2015.

This consortium will rely on the technical skills transferred to Gabon over the last few years:

- Line transects: field staff trained in conducting line transects by WCS and WWF over the last 15 years;
- Camera trap studies: field staff trained in camera traps positioning by Panthera experts over the last 15 years;
- Genetic analysis: development of SNP genetic markers and technology transfer to the IRET laboratory by ANPN since 2015;
- Positioning of acoustic sensors and data analysis in the framework of a collaboration with Cornell University and WCS.

This consortium will also draw on external expertise in data analysis, to benefit from the latest scientific advances from the best universities and apply them to conservation.

Compile the existing databases

Numerous survey studies have been conducted in Gabon, particularly since 2001 by WWF, WCS and the ANPN in partnership with the University of Duke, USA. These studies were conducted at different times and using different methodologies of line transects and recces. Furthermore, several camera trap studies have been conducted by Panthera in the areas between the national parks, but also by the Max Planck Institute in four study areas over a long time. Finally, telemetry data, as well as identification data for individuals in baïs are available.

It is essential to archive the results of these different studies and to develop methods of joint analysis in order to lay down a historical baseline. This approach will also help to make recommendations to harmonize future elephant research protocols. Reflections on the combined analysis of different data will be conducted by the consortium built for this project (Activity 1)

Identify the main population blocks

Previous surveys have mainly targeted national parks or areas defined by administrative boundaries such as forest concessions, rather than ecological boundaries (for a review, see Maisels & Strindberg 2012, Maisels *et al.*, 2013). With 80% forest cover, Gabon still offers a near-continuous habitat for forest elephants. Nevertheless, the rapid development of infrastructure and extractive industries is now fragmenting elephant habitat.

It is necessary to identify blocks of populations within which elephants roam freely, in order to monitor trends in each block and assess the risks of local extinction. These population blocks consist of one or two national parks and areas for other uses and are well managed, potentially providing a

secure habitat for elephants.

These population blocks will be identified through the compilation of existing elephant data (surveys, abundance estimates, genetic data, telemetry), expert opinion (consultative process), habitat data, National Wildlife Land Use Plan (PNAT) and potential barriers (roads, urban areas, extractive industries). Furthermore, the results of the national survey will help define the boundaries of the priority conservation areas (activity 3.1.1 of the NEAP).

Test, compare and identify the most trustworthy and suitable methodologies for each landscape and management needs.

Historically, the most commonly used method for forest elephants census is conducting line transects to count indirect signs, due to the low visibility of their habitat. However, the accuracy of this method is low because of the variability in production rates and degradation of dung. Other approaches have been proposed (Hedges 2012), but not tested in the context of Gabon, which has a near-continuous distribution of elephants and high expected numbers. Moreover, statistical analysis methods continually evolve and offer new possibilities (Elliot and Gopalswamy 2017).

Two pilot studies were begun in 2018:

Great Elephant Census – Forest initiative (ANPN – WCS – Vulcan): Three key sites (Ivindo, Loango and Wonga Wongué) were selected for a pilot study to test several approaches simultaneously: line transects, genetics, camera traps, baï monitoring, air monitoring. The combination of these different methods will be tested to improve the accuracy of population size estimates.

Continuous camera trap monitoring (ANPN - Panthera): camera traps will be installed for two years in a large area encompassing the Lopé and Waka national parks, to test the feasibility of permanent wildlife monitoring.

These pilot studies aim, on the one hand, to improve the accuracy and reliability of population size estimates and, on the other hand, to develop indicators of change in elephant population abundance, distribution and status. This will quickly alert national park managers, before a complete survey is completed every five years. Presence data collection will rely on the SMART system to develop rapid indicators for monitoring elephant abundance and distribution.

New methods of collecting and / or analyzing data will be tested every 4 or 5 years in line with the evolution of science and technology. The consortium will be responsible for staying up-to-date scientifically to ensure a dynamic research and development process.

Update Gabon's national elephant database

Two national surveys have been undertaken:

National Natural Resources survey (NRI): the ANPN, the National Climate Council and the Ministry of Water and Forests have developed a permanent monitoring program for forests, with the expertise of Duke University. The Large Mammal Monitoring Program builds on the systematic random sampling plan developed with support from Duke University for forest monitoring. Five two-kilometer transects are made at each sampling point at the expected rate of 100 points per year. Given the high poaching pressure, priority was given to the North-East of the country in the first phase of the project and the results confirmed a dramatic decline in the number of forest elephants in Minkébé National Park (Poulsen et al. 2017).

Great Elephant Census – Forest initiative: collaborative project ANPN-WCS-Vulcan; after an initial phase of testing different survey methods and different methods for analyzing and combining data in three pilot sites in 2018 (activity 4), surveys combining the methods approved during the first phase will be carried out in 2019 in priority conservation areas known to have the highest densities of elephants. This data will be added to data from

surveys currently being conducted by WWF in several areas.

These two national surveys use two different approaches for sampling and will provide complementary data to establish a baseline for monitoring elephant populations

Establish a regular elephant population monitoring program

To detect changes in forest elephant numbers in Gabon early, a regular monitoring program for key populations (Minkébé, Ivindo-Mwagna, Lopé, Wonga Wongué, Gamba complex, Monts de Cristal) will be defined by the consortium. This program will build on the results of Activity 4 and combine tested and approved methods to achieve:

- (1) National survey every ten years;
- (2) Reliable estimates of the high priority elephant population sizes (defined according to elephant density and poaching pressure) every five years;
- (3) Permanent monitoring of the population trends in order to be warned of conservation problems.

This will include, according to the results of activity 4, permanent monitoring by camera trap, combined, depending on the type of landscape, with presence indicators (SMART), individual monitoring in the baïs, air and acoustic monitoring, sex ratio and age structure assessments... etc. Funding is already secured for the permanent monitoring of 4 population blocks (Lopé & Waka, Minkébé, Mwagna & Ivindo, Wonga-Wongué). Funding is sought for the monitoring of the 3 remaining populations blocks (Monts de Cristal, Lonago & Moukalaba, Birougou).

The consortium will also define methods for statistical analysis of this data, for integrating different data types and obtaining population abundance or size estimates. The data from this monitoring program will be analyzed in synergy with monitoring the signs of human activity and elephant carcasses and will provide an early warning system for conservation problems.

The consortium may review the site monitoring program based on the development of new and reliable monitoring methods (Activity 5).

Assemble and send out a team responsible for key elephant population monitoring

An experienced field team will be formed to implement the permanent key population monitoring program defined in Activity 6. This joint ANPN-WCS-WWF team will bring together 20 experts with experience in forest elephant surveys. Training and surveys implemented in Gabon over nearly 20 years have enabled the development of local expertise from which a team responsible for monitoring elephant populations will be put together. Teams will be permanently sent out to the field to enable regular monitoring of priority sites.

Two postdoctoral project coordinators will be recruited to oversee field team deployment, data collection, archiving and analysis.

Put in place a mechanism for processing and quickly transferring data to managers

Memoranda of Understanding will be established with international partners and NGOs to ensure the immediate sharing of jointly collected data, without waiting for scientific publications to come out.

Furthermore, in order to ensure the rapid transmission of study results to managers, it is crucial to develop local capacity for data analysis. Training in raw data processing (camera traps, acoustic data, and laboratory analysis) and data analysis will be reinforced. Three or four people will be identified in the team for raw data analysis. Two postdoctoral researchers will be recruited for the statistical analysis of the data.

A consultant will be recruited for a short period to develop semi-automatic analysis and reporting tools in line with the methodology defined in Activity 6. He will train the data analysis team to use these tools.

Actors and other stakeholders

ANPN, WCS, WWF, Panthera, Partner universities (Duke, others).

Timeline (operational plans)

Activity	Sub-activity	years									
		1	2	3	4	5	6	7	8	9	10
Build a consortium for elephant population monitoring	<i>Sign an agreement with all concerned stakeholders</i>	X									
	<i>Twice yearly meetings to be held</i>	X	X	X	X	X	X	X	X	X	X
Compile the existing databases		X	X								
Identify the main population blocks		X									
Test, compare and identify the most trustworthy and suitable methodologies for each landscape and management needs	<i>Combination of line transects, genetics, camera traps, individuals monitoring in bai, air monitoring.</i>	X									
	<i>Permanent camera trap monitoring</i>	X	X								
Update Gabon's national elephant database		X	X								
Establish a regular key elephant population monitoring program	<i>Establish and approve a program</i>		X								
	<i>Review the program in line with scientific progress.</i>					X				X	
Assemble and send out a team responsible for elephant population monitoring	<i>Identify team members</i>		X								
	<i>Acquire equipment</i>			X				X			
	<i>Collect data</i>			X	X	X	X	X	X	X	X
Put in place a mechanism for processing and quickly transferring data to managers	<i>Develop statistical tools</i>			X							
	<i>Initial training</i>			X							
	<i>Update</i>					X				X	

Targets:

Identified targets over the next five and ten years are the following:

- (6) An elephant population scientific monitoring unit is operational and deployed in the field by 2023.
- (7) Permanent monitoring of priority sites by a survey team allows to guide and gauge conservation effort by 2023.
- (8) A new national population survey and a population trends estimate over 10 years are available by 2028.

Metrics:

Activity	Activity gauge	Results gauge
Build a consortium for elephant population monitoring	Collaboration agreement signed by the stakeholders; number of technical meetings called.	Number of publications in peer-reviewed scientific journals.
Compile the existing databases	Number of existing studies stored in the new database	Identification of priority conservation areas
Identify the main population blocks.	Map of elephant population blocks available.	
Update Gabon's national elephant database	% of the national territory for which population sizes are known	
Test, compare and identify the most trustworthy and suitable methodologies for each landscape and management needs	Number of methods tested, number of pilot sites, number of technical reports and/or scientific publications.	Precision of the elephant population size and trends.
Establish a regular key elephant population monitoring program	Number of key sites having a drafted and approved monitoring program	Proportion of the main sites where the elephant population trends are known.
Assemble and send out a team responsible for elephant population monitoring	Number of people recruited; list of equipment bought; number of man-days in the field on each site; number of camera traps positioned	
Put in place a mechanism for processing and quickly transferring data to managers	Number of people trained, number of training days, and number of reports completed.	Proportion of the main sites where the monitoring efforts are adjusted in line with estimated trends

Monitoring and evaluation plans:

Targets	Metrics (=indicators of progress)
(1) An elephant population scientific monitoring unit is operational and deployed in the field by 2023.	Proportion of the territory covered by regular monitoring; precision of the population size and trends estimates.
(2) Permanent monitoring of priority sites by a survey team allows to guide and gauge conservation effort by 2023.	Proportion of the main sites where the monitoring effort are adjusted in line with estimated trends
(3) A new national population survey and a population trends estimate over 10 years are available by 2028.	Proportion of the main sites where the elephant population trends are known.

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Budget:

Années 1-2 Personnel	Années 3-5	Année 6	Années 7-10	Total 10 ans	Requis	ANPN	ECOFAC	WCS	
2 coordinateurs de projet	Salaires 1 300 000 Fcfa/ mois (charges & assurance incluses) x 2 post-doc pendant 10 ans	62.400.000	93.600.000	31.200.000	124.800.000	312.000.000	249.600.000	30.000.000	32.400.000
5 coordinateurs de site	Salaires 607 500 Fcfa/ mois (charges & assurance incluses) x 5 personnes pendant 10 ans	72.900.000	109.350.000	36.450.000	145.800.000	364.500.000	256.365.000	29.160.000	78.975.000
15 assistants de terrain	Salaires 337 500 Fcfa/ mois (primes, charges & assurance incluses) x 15 personnes pendant 10 ans	121.500.000	182.250.000	60.750.000	243.000.000	607.500.000	478.575.000	32.400.000	96.525.000
Ecogardes	Salaires 337 500 Fcfa/ mois (primes, charges & assurance incluses) x 15 personnes pendant 10 ans	121.500.000	182.250.000	60.750.000	243.000.000	607.500.000	607.500.000	0	0
Chauffeurs	Salaires 475 000 Fcfa/ mois (charges & assurance incluses) x 2 personnes pendant 10 ans	22.800.000	34.200.000	11.400.000	45.600.000	114.000.000	101.650.000	0	12.350.000
1 technicien de laboratoire	Salaires 725 000 Fcfa/ mois (charges & assurance incluses) x 1 personne pendant 2 ans	18.850.000	0	9.425.000	0	28.275.000	28.275.000	0	0
Pilot testing			0						
Véhicules	2 véhicules 4x4 Landcruisers		50.000.000	50.000.000	0	0	0	50.000.000	
Equipement (camping, communication, navigation, collecte des données)	Matériel de camping, téléphones satellite, GPS et smartphones de terrain		44.000.000	44.000.000	0	0	17.000.000	27.000.000	
Photopièges	Achat de 50 à 220 photopièges à 150 000 Fcfa par site x 4 sites		98.250.000	98.250.000	0	0	41.250.000	57.000.000	
Analyses ADN	15 000 Fcfa par échantillon x 1500 échantillons		30.000.000	30.000.000	0	0	0	30.000.000	
Nourriture et logement équipes terrain	Per diem 10 000 F par jour et logement en ville/camps		78.420.000	78.420.000	0	0	23.100.000	55.320.000	
Transport local	Assurance véhicule, carburant, réparations		60.000.000	60.000.000	0	0	30.000.000	30.000.000	
Communication, batteries, cartes mémoires	Crédit de communication, impression fiches, batteries, cartes mémoires, pharmacie		22.720.000	22.720.000	0	0	16.720.000	6.000.000	
Survols aériens							0		
Formations et réunions	2 mois de formation, réunions techniques avec des experts internationaux		81.600.000	81.600.000	0	0	6.000.000	75.600.000	
Inventaire national			0						
Equipement (camping, communication, navigation, collecte des données)	Matériel de camping, téléphones satellite, GPS et smartphones de terrain		27.000.000	27.000.000	0	0	0	27.000.000	
Nourriture et logement équipes terrain	Per diem 10 000 F par jour et logement en ville/camps		86.000.000	86.000.000	0	0	0	86.000.000	
Transport local	Assurance véhicule, carburant, réparations		114.070.000	114.070.000	0	0	0	114.070.000	
Communication, batteries, cartes mémoires	Crédit de communication, impression fiches, batteries, cartes mémoires, pharmacie		24.000.000	24.000.000	0	0	0	24.000.000	
Survols aériens			0				0		
Suivi des baies	Missions équipe d'observation		67.500.000	67.500.000	0	0	0	67.500.000	
Inventaire des sites prioritaires (tous les 5 ans)			0						
Equipement (camping, communication, navigation, collecte des données)	Matériel de camping, téléphones satellite, GPS et smartphones de terrain		27.000.000	27.000.000	27.000.000	27.000.000	0	27.000.000	
Nourriture et logement équipes terrain	Per diem 10 000 F par jour et logement en ville/camps		129.000.000	129.000.000	129.000.000	129.000.000	0	129.000.000	
Transport local	Assurance véhicule, carburant, réparations		171.105.000	171.105.000	171.105.000	171.105.000	0	171.105.000	
Communication, batteries, cartes mémoires	Crédit de communication, impression fiches, batteries, cartes mémoires, pharmacie		36.000.000	36.000.000	36.000.000	36.000.000	0	36.000.000	
Matériel spécifique	Selon la méthode validée: consommables de laboratoire, photopièges...etc.)		100.000.000	100.000.000	100.000.000	100.000.000	0	100.000.000	
Suivi permanent des 7 blocs de populations			0						

Véhicules	2 véhicules 4x4 Landcruisers		54.000.000			54.000.000	54.000.000			
Equipement (camping, communication, navigation, collecte des données)	Matériel de camping, téléphones satellite, GPS et smartphones de terrain et renouvellement 25% par an	102.000.000	25.500.000	102.000.000		229.500.000	178.500.000	51.000.000		
Photopièges	Achat de 220 photopièges à 150 000 Fcfa par site x 6 sites et renouvellement 25% par an	386.718.750	72.187.500	288.750.000	747.656.250	592.968.750	154.687.500	AFD/ 328 000 000 pour 2 sites		
Nourriture et logement équipes terrain	Per diem 10 000 F par jour et logement en ville/camps x 7 sites x 250 jours par an	242.550.000	193.620.000	774.480.000		1.210.650.000	1.141.350.000	69.300.000		
Transport local	Assurance véhicule, carburant, réparations	315.000.000	105.000.000	420.000.000		840.000.000	750.000.000	90.000.000		
Communication, batteries, cartes mémoires	Crédit de communication, impression fiches, batteries, cartes mémoires, pharmacie	175.560.000	21.000.000	84.000.000		280.560.000	230.400.000	50.160.000		
Survols aériens	Carburant pour l'avion			0			0			
Suivi des baïs	Présence permanente d'une équipe dans les baïs prioritaires pendant 8 ans	101.250.000	101.250.000	405.000.000		607.500.000	607.500.000	0		
Formations et réunions	Visite de consultants, réunions techniques avec des experts internationaux	18.000.000	6.000.000	24.000.000		48.000.000	48.000.000	0		
TOTAL		1.203.510.000	1.996.728.750	1.197.637.500	2.900.430.000	7.298.306.250	5.152.013.750	1.050.922.500	225.630.000	869.740.000

IMPLEMENTATION PLAN (MEDIUM TERM; 3 YEARS)

GABON NEAP IMPLEMENTATION PLAN (Medium Term, 3 years)									
Objective 1: PROTECT ELEPHANT POPULATIONS BY MINIMIZING POACHING AND IVORY TRADE									
Target 1: By 2021, elephants killed illegally to be reduced to acceptable levels (PIKE<0,5)									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Start Final.
1.1	National surveillance strategy available.	1.1.1	Develop a surveillance strategy for each National Park (in line with the management plan) after consulting with the different institutions and considering the surveillance and ecological data.	Based on field data and compatible with SMART	1	ANPN	A monitoring strategy for each national park was developed and considered in a management plan after reviewing monitoring data and ecological data.	NA	On-going
		1.1.2	Develop a national surveillance strategy in collaboration with different institutions including controlling transport and traffic routes and country exit points using fixed border	See above	1	ANPN Military	A national surveillance strategy has been developed in collaboration with other institutions. Document available.	NA	On-going

			crossings and the deployment of sniffer dogs.						
		1.1.3	Adapt the surveillance strategy based on intelligence and patrol data, including maintaining maps of trails and camps used by poachers and ivory trafficking networks	Adapt to SMART use	1	ANPN	The surveillance strategy based on intelligence and patrol data was adapted and verified by using SMART.	NA	On-going
1.2	Patrol staff well trained and available for deployment.	1.2.1	In each national park in each province, after the transition from National Parks National Agency to the National Agency for the Protection of Nature, assess needs in terms of staff and capacity building	Staff assessments underway for all key sites	1	ANPN	Assessments in park management plans for each key site	Secured ANPN: FCFA 14,757,100,000 Requested: US\$ 16,725,456 (3 yrs) Yr1: US\$ 2,682,544 Yr2: US\$ 5,195,952 Yr3: US\$ 8,846,960 Funding Proposal GA1 Targets 1.2 & 1.3 All Activities	Fin. 2018 (2yrs)
		1.2.2	Recruit necessary personnel to ensure the enforcement of wildlife law in different sites	Recruitment procedures	1	ANPN	List of National Park patrol staff	See above	On-going
		1.2.3	Review, develop and	Reviewing	1	ANPN	Reports on		Fin.

			harmonize training programs for wildlife enforcement personnel.	process			training programs	See above	On-going
		1.2.4	Implement rigorous and focused staff training based on the responsibilities of each institution	Training modules Lopé CEDDAM Lopé MTC	1	ANPN	Number of patrol staff trained/PA/time unit	See above	On-going
		1.2.5	1.2.5 Implement a continuous training program for all staff including training in new anti-poaching and investigation techniques.	See above	1	ANPN	Number of patrol staff trained/PA/time unit	See above	On-going
1.3	All protected areas optimized and operational with regard to anti-poaching activities	1.3.1	Conduct a needs assessment in terms of infrastructure, equipment and communication in each national park and re-evaluate situation annually.	Assessment as part of NP management plans	1	ANPN	Assessment reports (included in management plans)	See above	On-going
		1.3.2	Provide the necessary equipment, including appropriate transportation and ensure that rigorous inventory, maintenance and monitoring is in	Procurement	1	ANPN	Procurement lists/Number of fully equipped National Parks	See above	On-going

			place.						
		1.3.3	Continue construction and maintenance of the necessary infrastructure in each national park, including access routes and monitoring camps.	Contractors	1	ANPN	Finalized infrastructural developments	See above	On-going
		1.3.4	Provide each national park with the necessary communication procedures and tools, including operating rooms for information centralization and rapid response programming	Procurement Contractors consultants	1	ANPN	Number of Parks fully equipped with communication tools and operating	See above	On-going
		1.3.5	Ensure that each national park has an annual budget that is sufficiently large to operate and deploy regular patrols	Fund raising	1	ANPN	Number of Parks fully operational	See above	On-going
		1.3.6	Implement the anti-poaching strategy activities, including patrols with army and gendarmerie support where	Anti-poaching strategy	1	ANPN	Number of Parks fully operational	See above	On-going

			necessary.						
		1.3.7	Monitor the effectiveness of anti-poaching measures through SMART	Initiate SMART in all NPs Training	1	ANPN	Number of Parks using SMART	See above	On-going
1.4	Poaching controlled outside protected areas	1.4.1	Conduct needs assessments for infrastructure, equipment, communication in each province and provide necessary equipment	Carry out assessment of existing equipment and communication tools for areas outside PA system and determine requirements	1	ANPN	Needs assessments for infrastructure, equipment, communication in each province were completed and necessary equipment provided. Updated assessments and provision.	External: US\$ 4,747,500	In progress
		1.4.2	Strengthen controls at key export points and on ivory trafficking routes	Establish staffed barriers and other check points at strategic locations	1	ANPN DGFAP	Controls at key export points and ivory trafficking routes have been strengthened. Number of offenders apprehended.	NA	In progress
		1.4.3	With input from the authorities responsible for the management of the various land concessions, identify threats, mitigation	Identify relevant land concessions, liaise with authorities and conduct needs	1	ANPN DGFAP	Threats, mitigation measures and the need for anti-poaching measures were identified with	NA	in progress

			measures and needs for anti-poaching measures	assessment			the help of the authorities responsible for managing the various land concessions. Report available.		
		1.4.4	Incorporate protection measures (patrols, barriers, access roads control) in PGES (environmental and social management plans) including areas no longer being used	Identify key areas and locations for protection measures, develop strategy and deploy patrols and/or manned barriers	1	ANPN DGFAP	Protective measures (patrols, barriers, control of access roads) have been incorporated into PGES, Management Plans), including areas that are no longer used.	NA	on-going
		1.4.5	Develop Memoranda of Understanding for protection measures implementation and ensure a regular presence of the ANPN and/or DGFAP on land concessions (patrols, permanent stations on remote sites)	Meetings with stakeholders	1	ANPN	Memoranda of Understanding developed and available.	NA	in progress
		1.4.6	Expand SMART implementation and data sharing		1	ANPN	All PAs using SMART, evaluation on-going.	NA	in progress

		1.4.7	Conduct awareness raising campaigns on wildlife laws and regulations for private sector (extractive industries, transporters) employees working or living in contact with wildlife.	Meetings	1	ANPN	Awareness campaigns on wildlife laws and regulations for private sector employees (extractive industries, carriers) were conducted and archived.	External: US\$ 45,000	2019 (Start)
1.5	An intelligence network is operational to dismantle Ivory trafficking networks	1.5.1	Evaluate current intelligence network capacity on wildlife trafficking and identify areas for improvement.	Evaluate effectiveness of current network, analyze data to detect bottlenecks and weak links and propose adaptation of current strategy	1	ANPN	The current capacity of the wildlife trafficking intelligence network has been assessed and areas for improvement identified. Confidential evaluation reports.	NA	2019 (Start)
		1.5.2	Recruit and train personnel to develop and manage the intelligence and investigation network.	Recruitment procedures Training modules (Consultant)	1	ANPN	Staff to develop and manage the intelligence and investigation network was recruited and trained. Number of staff at work.	External: US\$ 19,000	2019 (Start)
		1.5.3	Train all staff in data collection and	Training	1	ANPN	Number of staff trained.	NA	on-going

			transmission						
		1.5.4	Develop and manage informant networks within and around national parks.	Gradual process of incorporating more informers, while raising awareness among general public	1	ANPN	Informant networks developed and managed in and around national parks.	External: US\$ 10,000	2019 (Start)
		1.5.3	Improve the main operations room to centralize information in Libreville, including the use of specific software to facilitate the management of intelligence data.	Procurement of computers and software	1	ANPN	The main headquarters operations room has been improved for intelligence and information management has been facilitated by the use of specific software.	External: US\$30,000	in progress
		1.5.6	Develop real-time data transmission networks so the information can be used for a timely response	Procurement of 35 DeLome (Garmin) GPSs	1	ANPN	Real-time data transmission networks developed.	External: US\$ 175,000	2019 (Start)
1.6	A special multi-institutional taskforce is available to respond to emergency	1.6.1	Create and train an elite pursuit unit for forest intervention, who will use the real time data received from the operations	Training module, procurement vehicles	1	ANPN Military	An elite pursuit unit trained and ready for action.	External: US\$ 10,815,006 Yr1: US\$ 3,871,387 Yr2: US\$ 4,392,918 Yr3: US\$ 2,550,701	2020 (Start)

	situations anywhere in the country		rooms and will be made up of ANPN trackers and armed forces members.						
		1.6.2	Create and train a special intervention force with the ANPN/DGFAP/Police /Gendarmerie that can react rapidly to intelligence information and stop traffickers.	Training module, procurement vehicles	1	ANPN DGFAP Police Gendarmerie	Multi-Agency Taskforce (ANPN / DGFAP / Police / Gendarmerie) created and trained	Funded by AFD	2020
1.7	Wildlife crime investigation is supported by innovative technical solutions	1.7.1	Strengthen the ivory detection sniffer dog units in order to multiply the seizures at the main export points and trafficking routes.	Procurement of dogs	1	ANPN	The sniffer dogs units reinforced	External: US\$ 80,000	On-going
		1.7.2	Train field officers in the use of camera traps for poacher detection and identification.	Training	1	ANPN	Number of field agents trained per year	NA	On-going
		1.7.3	Set up a scientific police laboratory in Libreville with qualified personnel to analyze wildlife and human evidence (fingerprints, ballistics and genetic	Consultant, Procurement, Recruitment, Training	1	ANPN Police	Scientific police laboratory with qualified personnel set up in Libreville.	External: US\$ 220,000	2020 (Start)

			analysis)						
		1.7.4	Strengthen law enforcement personnel capacity to investigate wildlife related crime scenes and to provide forensic evidence in court with a traceability chain.	Training	1	ANPN Police	The ability of law enforcement personnel to investigate wildlife crime scenes strengthened and the chain of custody designed	NA (see above)	2020 (Start)
		1.7.5	Analyze genetic samples of seized ivory to identify the areas targeted by poachers and the trafficking routes.	Analyze samples in foreign laboratories	1	ANPN	Number of genetic samples of ivory seized and analyzed	External: US\$ 37,500	On-going
1.8	The national ivory management system is strong and transparent	1.8.1	Evaluate and improve where necessary the national procedures for seized ivory management and marking, including a national data base, strict chain of custody and systematic genetic sampling.	Identify loopholes and weak links, develop protocols and database. This item includes procurement of equipment, personnel costs and local travel.	1	ANPN	National management system process of ivory seized evaluated and improved.	External: US\$ 72,000	In progress
		1.8.2	Improve and maintain a highly secure central storage facility for	Identify weak spots in security of storage facility	1	ANPN	A national system for transparent management of ivory stocks,	NA	In progress

			the national stock of seized ivory, weapons and other illegal wildlife products	and strengthen			weapons and other illegal wildlife products set up, operational and monitored		
		1.8.3	Assess available decentralized ivory storage locations in terms of security, filing and storage capacity.	Identify, inventory and evaluate. Strengthen.	1	ANPN	Decentralized ivory storage locations assessed	NA	In progress
		1.8.4	Depending on identified needs, arrange, secure or construct secure storage facilities specifically for the temporary storage of seized ivory, weapons and other illegal wildlife products.	Contractors Construct storage facility in each park	1	ANPN	Secure storage facilities specifically for temporary storage of seized ivory, weapons and other illegal wildlife products identified, organized and constructed	External: US\$ 117,000	In progress
		1.8.5	Establish secure storage space, independent of ivory stock, for the long-term storage of the ivory samples collected systematically.	Contractor	1	ANPN	Secure storage space, independent of the ivory stock, for the long-term storage of routinely collected ivory samples established	External: US\$ 12,000	2020 (Start)

		1.8.6	Implement the marking, inventory and stock management system in all sites involved in the seizure and/or storage of ivory.	Apply	1	ANPN	The system for marking, inventory and management for all sites involved in the seizure and / or storage of ivory implemented	NA	In progress
		1.8.7	Conduct annual audits of ivory stocks at the national level.	Audits	1	ANPN	Number and reports on annual audits of ivory stocks at national level conducted	NA	In progress
		1.8.8	Implement an action plan for stock disposal.	Collection of ivory at remote sites	1	ANPN	Availability of action plan	External: US\$ 11,000	In progress
1.9	Dissuasive national legal framework	1.9.1	Amend existing criminal laws and review the forestry code in particular the provisions for penalties and sanctions.	Workshop, meetings	1	ANPN	Penal code adapted and strengthened with regard to wildlife crime	NA	On-going
		1.9.2	Transpose international conventions into national laws, especially CITES regulations.	Meetings	1	ANPN	Forestry code reviewed. Review available.	NA	On-going
1.10	The actors in the legal chain are well trained	1.10.1	Regularly train field officers in criminal proceedings,	Training modules (see 1.7.3)	1	ANPN	Number of field officers trained in criminal	NA	2019 (Start)

	in the fight against wildlife crime.		detailed reporting and the collection of data and evidence on crime scenes in order to send strong cases to court.				proceedings and evidence on crime scenes per time unit		
		1.10.2	Train magistrates in the management of the crime scene, the fight against organized crime, the specificities of wildlife crime, special investigation techniques, the use of evidence provided by forensic science and the fight against corruption.	Training sessions, meetings	1	ANPN	Number of magistrates trained, aware, and cooperative.	External: US\$ 5,400	2019 (Start)
		1.10.3	Develop guidelines on the applicable laws on wildlife crime to ensure maximum penalties.	Workshop/Meetings	1	ANPN	Guidelines on the Laws of Wildlife Crime developed and circulated.	NA	2019 (Start)
1.11	Strengthening of prosecution cases against wildlife crime	1.11.1	Establish a unit responsible for monitoring and evaluating the prosecutions linked to wildlife crime and in particular elephants	Set up monitoring system	1	ANPN	The unit responsible for evaluating prosecutions linked to wildlife crime is established and national judicial monitoring	NA	2019 (Start)

							system set up and operational by 2028		
		1.11.2	Create a database on wildlife crime prosecutions.	Create database	1	ANPN	Database on wildlife crime prosecutions available.	NA	On-going
		1.11.3	Follow the enforcement of sentences and penalties	Monitoring	1	ANPN	Reports available	NA	On-going
1.12	Opportunities for corruption reduced in the departments responsible for wildlife.	1.12.1	Develop and establish a code of conduct for the personnel of the wildlife authorities.	Internal	1	ANPN	Code of conduct for staff of the wildlife authorities developed and circulated	NA	On-going
		1.12.2	Implement strict rules regarding corruption cases amongst the wildlife authorities in line with government strategies	Code-of-conduct produced and circulated	1	ANPN	Strict rules on corruption cases among wildlife authorities in place and disseminated (Code-of-conduct)	NA	On-going
		1.12.3	Create and train an anti-corruption unit for corruption cases examination including if necessary lie detection tests.	Internal	1	ANPN	Anti-corruption unit set up and operational, at least 95% of the cases corruption observed during arrests and prosecutions are	NA	2019 (Start)

							documented, forwarded to competent authorities and appropriate actions are taken against the corrupt agents.		
	AEAP/GEAP Objective 1						Total (3 years):	US\$ 33,121,862 Secured ANPN: FCFA 14,757,100,000	
	Project Proposals*						Total (3 years):	US\$ 16,725,456	
	Remaining budget						Total (3 years):	US\$ 16,396,406	

*see RMP&B

Objective 2: GUARANTEE SUFFICIENT HABITAT TO MAINTAIN ELEPHANT POPULATION ABUNDANCE, DISTRIBUTION AND CONNECTIVITY.									
Target 2: No measurable loss in the size of the elephant range, with connectivity improved for at least 3 key populations by 2028.									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Start Final.
2.1	Priority conservation areas for elephants have been identified	2.1.1	Define and delineate priority conservation areas for elephants, necessary to maintain viable populations, using previous studies and more recent data on population densities, habitat and genetic particularities.	Desk study	1	ANPN	Maps of priority conservation areas for elephants available.	NA	On-going
		2.1.2	Through legal documents, officially recognize priority conservation areas, not only protected areas but also large areas dedicated to other uses.	Develop, produce and communicate new land-use plan	1	ANPN PNAT	The national land use plan is available and all documents and maps are provided	NA	On-going
2.2	Elephant habitat is sustainably protected in priority conservation areas	2.2.1	Evaluate the legal requirements (EIA and development/land use plans) and international best practices (FSC	Desk study	1	ANPN	The requirements have been established, the National Land Use Plan has	NA	2019 (Start)

			standard) and their suitability for elephant habitat protection.				been validated and implemented, a guide to good practices for the protection of habitat has been developed and implemented		
		2.2.2	Clearly define the obligations for habitat maintenance in elephant priority conservation areas and integrate them into the development/ land use plans and PGES of the land concessions in these areas.	Desk study	1	ANPN	Forest Management plans, land use plans, Environmental and Social Management Plans define habitat maintenance obligations for elephant conservation priority areas and include these in their documents.	NA	2019 (Start)

		2.2.3	Train managers to implement good management practices for elephant habitat preservation	Training sessions (Capital)	1	ANPN	All managers trained on good management practices for elephant habitat preservation	External: US\$ 39,000	2019 (Start)
		2.2.4	Train government officials to monitor and implement these obligations in the field.	Training sessions (field)			Number of officials trained	External: US\$ 4,800	On-going
2.3	Connectivity is maintained between priority conservation areas for elephants	2.3.1	Identify potential corridors between priority conservation areas for elephants, using predefined criteria and knowledge of the ecology and genetic structure of elephants and their responses to threats.	Desk study	1	ANPN	Number of corridors identified. Availability of reports.	NA	2018 (Start)
		2.3.2	Formally classify corridors to maintain connectivity areas necessary for elephant movement	Desk study	1	ANPN	Number of corridors formally classified	NA	2018 (Start)
		2.3.3	Develop agreements between different actors for the	Meetings Workshop	1	ANPN Logging Companies	Reports SMART data	External: US\$ 6,500	In progress

			protection and/or restoration of the habitat in the corridors (delimitation of zones, awareness raising and patrols responsible for upholding the law)						
		2.3.4	Develop Memoranda of Understanding with bordering countries for the creation of buffer zones to ensure the continuity of protected areas on the other side of the border	Extensive travel to meet with wildlife authorities of neighboring countries	1	ANPN	Number of protocols and memoranda drafted and signed with border countries.	External: US\$ 32,400	On-going
2.4	National Land use planning in Gabon considers elephant population ecology and distribution	2.4.1	Include priority conservation areas and corridors in the PNAT to ensure the long term presence of extractive industries that deforest the least in these areas.	Desk study	1	PNAT	Priority Conservation Areas and Corridors have been included in the National Land Use Plan	NA	2020 (Start)
		2.4.2	Examine existing and future roads and transport networks and assess their current and future	Desk study	1	PNAT	Transport networks are established, and put into a geographic	NA	On-going

			traffic (using a range of scenarios including access to agricultural and mineral resources and connections between major urban centers) and the necessary mitigation measures				information system for monitoring mitigation measures		
		2.4.3	Examine current planned and proposed land use projects (including palm oil concessions) and assess the mitigation measures needed to reduce their negative impacts on elephant populations.	Desk study	1	PNAT	Expected spatial planning projects identified and transferred to a mapping system for monitoring mitigation measures	NA	On-going
		2.4.4	Include mitigation measures for roads and various land use projects in the PNAT.	Desk study	1	ANPN	Mitigation measures for roads and various land use projects in the PNAT	NA	2020 (Start)
2.5	A monitoring and evaluation system is implemented	2.5.1	Implement monitoring of human activities and elephant populations through the	Regular monitoring by protected area staff	1	ANPN	Human and elephant population activities in the corridors	NA	On-going

			widespread use of SMART in priority conservation areas and corridors.				incorporated in SMART		
		2.5.2	Strengthen compliance monitoring with legal procedures (drafting, approval, implementation and monitoring for development plans and PGESs)	Desk study	1	ANPN	Compliance monitoring and legal process incorporated into approved EIAs and PGES for all permits located in the priority Conservation Areas for Elephants	NA	2019 (Start)
		2.5.3	Develop and implement evaluation charts and procedures to check good harvesting practices and habitat quality for elephants.	Desk study	1	ANPN	Procedures and good practices for collecting data on habitat quality and elephant populations are collated in a manual of procedures	NA	2019 (Start)
		2.5.4	Evaluate the	Regular	1	ANPN	Efficiency of	External:	2020

			effectiveness of corridors using different techniques (SMART, trap cameras, transmitters collars)	monitoring complemented with additional camera traps in corridors and radio-collared elephants of populations using these corridors			the corridors is evaluated using different techniques such as SMART, cameras traps and transmitter collars, and report available.	US\$ 111,500	(Start)
	AEAP/GEAP Objective 2 Remaining budget						Total (3 years):	US\$ 194,200	

Objective 3: MITIGATE AND SUSTAINABLY MANAGE HUMAN-ELEPHANT CONFLICT									
Target 3: Human-elephant conflict reduced to acceptable levels with zero loss of human life by 2028.									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Final. (Dur)
3.1	The specialized unit in charge of Human-Elephant Conflict in Gabon (UHE) is operational	3.1.1	Strengthen UHE staffing and training, including the provincial sub-units	Strengthen and equip UHE and set up joint ANPN-GDFAP HEC teams in 9 province	2	ANPN DGFAP	HEC units operational, reports available	Secured ANPN: FCFA 631,800,235	On-going 2023 (5 yrs)
								Requested: US\$ 16,963,833 (3 yrs)	
								Yr1: US\$ 6,300,476 Yr2: US\$ 5,909,973 Ys3: US\$ 5,890,624 Funding Proposal GA2 Targets 3.1 – 3.3 All Activities	
		3.1.2	Organize exchanges with counterparts in other countries and HEC specialist (IUCN action group, experienced NGOs)	Exchanges	2	ANPN DGFAP IUCN NGOs	Reports on exchanges	See above	On-going
		3.1.3	In consultation with various stakeholders (DGFAP, ANPN, Ministry of Agriculture, IGAD, Farmers) revise the	Workshops	2	ANPN DGFAP MoA IGAD	Revision published	See above	On-going

			forest code, the national strategy for HEC management and provide the implementation decrees.						
		3.1.4	Guarantee the financing and resources for the UHE	Fundraising/pr oposals	2	ANPN	Annual technical and financial report	See above	2016-2025
3.2	Guidelines for the mitigation of crop depredation by elephants are available.	3.2.1	Identify mitigation methods to reduce the probability of harvest damage by elephants by compiling information from Gabon and around the world as well as available recommendations and tool kits (IUCN, FAO)	Compilation of information	2	ANPN DGFAP IUCN NGOs FAO	Reports on pilot models	See above	In progress
		3.2.2	Test the effectiveness of identified methods using specific scientific protocols, in several sites across the country.	Identify, develop and test different protocols	2	ANPN DGFAP	Test reports	See above	In progress
		3.2.3	Investigate the possibility of implementing local	Liaise with insurance companies	2	ANPN DGFAP Insurance	Reports		2020 (Start)

			insurance policies with private companies or low-cost premium to compensate for the damage done by elephants to farmers.			companies		See above	
		3.2.4	Based on the results of the studies carried out, develop guidelines for the mitigation of crop depredation risks for farmers and local authorities.	Deduct and develop guidelines	2	ANPN DGFAP	Guidelines developed and circulated	See above	2020 (Start)
3.3	Local communities are actively involved in managing HEC	3.3.1	Designate local rapporteurs and community guards to work closely with the UHE.	Training sessions	2	ANPN DGFAP	Number of local rapporteurs and guards trained	See above	In progress
		3.3.2	Strengthen the involvement of the CCGLs and other local organizations in HEC assessment and management.	Liaise and meetings	2	ANPN DGFAP CCGLs	Number of meetings with local organizations	See above	2020 (Start)
		3.3.3	Conduct regular awareness raising campaigns on wildlife law, established guidelines and	Distribute pamphlets, streamline and centralize procedures for complaints	2	ANPN DGFAP CCGLs	Number of pamphlets distributed, results of streamlining procedure	See above	2020 (Start)

			complaint procedures.	filing, present during CCGL meetings					
		3.3.4	Support local communities in the implementation of mitigation measures	Install barriers, assist with best practice methods	2	ANPN DGFAP CCGLs	Number of local communities provided with effective mitigation measures; trend in number of complaints received	See above	2020 (Start)
3.4	Simple and effective procedures are in place for conflict and damage reporting	3.4.1	Develop a simplified administrative procedure to report crop damage and encourage the reporting of all incidents (i.e. by phone)	Workshop	2	ANPN DGFAP CCGLs	Initial trend in complaints after procedure simplified	NA	2020 (Start)
		3.4.2	In consultation with the DGFAP, the ministry of agriculture, the ANPN, identify effective and cheap methods to evaluate and quantify elephant damage.	Meetings	2	ANPN DGFAP CCGLs	Methods identified/reports	NA	In progress
		3.4.3	Produce guidance	See above	2	ANPN	Documents	NA	2021

			documents for government officials, especially for publicizing enforcement decrees.			DGFAP	and circulation		(Start)
		3.4.4	Train government officials in the assessment of crop damage, according to a standardized protocol and to produce reports.	Training modules	2		Number of officials trained	See above	In progress
		3.4.5	Train field officers (ANPN, DGFAP) in conflict management with villagers.	Training modules	2		Number of field officers trained	NA	2021 (Start)
3.5	HEC monitoring mechanism is in place.	3.5.1	Create a national HEC database and rapid information transmission procedures to track the impact of crop depredation.	Database creation	2		Database up and running	NA	2021 (Start)
		3.5.2	Evaluate and monitor change in local populations' and the general public's perception of crop damage by elephants.	Data analysis	2		Statistics and reports on evaluation	NA	2021 (Start)
		3.5.3	Conduct audits to monitor the proper management of the	Audit	2		Audit reports	NA	2021 (Start)

			financial compensation system.						
	AEAP/GEAP Objective 3						Total (3 years):	US\$ 16,963,833	
	Project Proposals*						Total (3 years):	US\$ 16,963,833 Secured ANPN: FCFA 631,800,235	
	Remaining budget						Total (3 years):	0	

*see RMP&B

Objective 4: INCREASE AWARENESS ON ELEPHANT CONSERVATION AND MANAGEMENT									
Target 4: Legal killing of elephants as a crop control measure reduced by 75% by 2028.:									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Final. (Dur)
4.1	Implement a communication awareness strategy centered around elephant conservation	4.1.1	Strengthen the capacity of the ANPN Communications Unit, both in terms of expertise and equipment, to facilitate changing the public opinion on elephant conservation issues.	Internal	1	ANPN	Well-equipped communication team operational and behavioral changes noticeable and measurable.	NA	On-going
		4.1.2	Develop a communication awareness strategy centered on elephants aimed at all stakeholders.	Consultant	1	ANPN	Strategy developed and circulated.	External: US\$ 14,600	On-going
		4.1.3	Produce and disseminate awareness raising tools about the importance of elephant conservation, wildlife laws and government action.	Produce booklets, posters, flyers and pamphlets and distribute. TV programs, radio broadcasts	1	ANPN	Tools to raise awareness about the importance of elephant conservation produced and disseminated	External: US\$ 90,000	On-going

		4.1.4	Develop a communication strategy to regularly inform other government institutions and relevant stakeholders on management decisions pertaining to elephant conservation.	Internal (Communications Unit)	1	ANPN	Strategy available	NA	2019 (Start)
		4.1.5	As far as this is practically feasible, incorporate relevant traditional beliefs and practices in the conservation and management of the African forest elephant.	Internal (Communications Unit)	1	ANPN		NA	2019 (Start)
		4.1.6	4.1.6 To sway the public against foreign and domestic threats to Gabon's natural heritage through campaign messaging that improves understanding and nurtures national pride with regard to	Internal (Communications Unit)	1	ANPN		NA	2019 (Start)

			parks and wildlife.						
		4.1.7	4.1.7 To change the narrative regarding human-elephant conflict by highlighting pilot mitigation projects, identifying target villages for expansion and broadcasting the link between rural crop raiding and forced migration of elephants through commercial activities and poaching.	Internal (Communications Unit)	1	ANPN		NA	2019 (Start)
		4.1.8	Support national efforts to develop an economically contributory ecotourism industry.	Internal (Communications Unit)	1	ANPN		NA	2019 (Start)
		4.1.9	Work closely with international organizations such as WildAid to develop a target specific communications strategy with the principal aim to reduce the	Internal (Communications Unit)	1	ANPN		TBD	2019 (Start)

			international demand of ivory.						
	AEAP/GEAP Objective 4 Remaining budget						Total (3 years):	US\$ 104,600	

Objective 5: CONDUCT RESEARCH AND MONITORING TO SUPPORT CONSERVATION DECISIONS WITH SCIENTIFIC EVIDENCE Target 5: By 2024, a scientifically based monitoring program is generating in-depth information on the status of the national elephant population as regular feedback for adaptive management.									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Start Final.
5.1	The national natural resource data base is up-to-date	5.1.1	Complete the inventory of Gabon's natural resources, including elephant density assessment at national level.	Different survey techniques	1	ANPN WCS Panthera	The natural resources inventory and elephant density assessment completed and report available.	Secured years 1 – 2 from: ANPN/WCS/ECOFAC/A FD: FCFA 1,203,510,000	On-going
		5.1.2	Undertake a more in-depth inventory of key elephant populations, including the	Desk study	1	ANPN	A more in-depth inventory of the main elephant	See above	On-going

			compilation of previous studies' results.				populations and the compilation of the results of previous studies have been undertaken. Report available.		
		5.1.3	Create a national database of all recent and old elephant data.	Database creation	1	ANPN	A national database of all recent and old elephant data created.	NA	2019 (Start)
5.2	Elephant research is coordinated at national level	5.2.1	Set up a research team in charge of developing key elephant research programs and coordinating the research projects at national level	Establish consortium to mobilize human resources, design research program and coordinate	1	ANPN WCS Panthera	A research team in charge of developing key elephant research programs set up and operational.	Secured ANPN:	2019 (Start)
								FCFA 182,250,000	
								Requested:	
								US\$ 3,266,062 (3 yrs)	
								Funding Proposal GA4 Targets 5.1 – 5.5 All Activities	
		5.2.2	Develop a forest elephant strategy for the ANPN based on conservation needs.	Desk study	1	ANPN WCS Panthera	A forest elephant strategy for the ANPN based on conservation needs	NA	2019 (Start)

							developed. Report available.		
5.3	Ensure that research results help to guide conservation actions.	5.3.1	Implement major research programs (population dynamics, genetic structure of populations, the study of seasonal movements, extractive industries impact, health monitoring.	Design and implement	1	ANPN WCS Panthera	Major research programs implemented.	See above	On-going
		5.3.2	Put in place mechanisms for research programs results to be regularly reported to the various actors involved in elephant management.	Desk study	1	ANPN WCS Panthera	Mechanisms for communicating research results in place.	NA	2019 (Start)
5.4	Research enables evaluation of the effectiveness of conservation actions	5.4.1	Test and compare the different forest elephant population inventory techniques available to establish an efficient methodology in terms of cost and time.	Compare results of line transects, camera, genetics, individual and air techniques	1	ANPN WCS Panthera	Inventory techniques tested and compared. Report available.	See above	2019 (Start)
		5.4.2	Implement regular monitoring of the	Establish program	1	ANPN WCS	Regular monitoring		2019 (Start)

			elephant population status in national parks, priority conservation areas and corridors.	based on results 5.4.1 and regularly review.		Panthera	of the status of the elephant population in national parks, priority conservation areas and corridors is put in place	See above	
		5.4.3	Develop and implement indirect population monitoring indicators (standardized data collection on carcasses and ivory tips, genetic analysis of seized ivory.	Use best-result indicators as indices of rate of mortality, surviving numbers, illegal killing pressure, trafficking routes, etc.	1	ANPN WCS Panthera	Indicators for indirect population surveillance (collection of standardized data on carcasses and ivory tips, genetic analysis of seized ivory developed and implemented. Report available.	See above	2019 (Start)
		5.4.4	Encourage the development of new conservation technology for	Use results of programs to design effective and	1	ANPN WCS Panthera	New conservation technologies for		On-going

			monitoring populations and poaching pressure (drones, thermal imaging, cameras, etc.)	efficient (cheap) long-term monitoring program			monitoring populations and poaching have been taken into account and implemented. Report available.	See above	
5.5	Research conducted in Gabon supports international decisions	5.5.1	Develop regional studies and/or harmonize the methods being used to increase knowledge of the forest elephant (regional inventory, genetic structure)	Fundamental research with adaptive tendency	1	ANPN WCS Panthera	Regional studies and methods to increase knowledge about the forest elephants developed and harmonized. Report available.	See above	2019 (Start)
		5.5.2	Share the results with international databases (African Elephant database, MIKE, ETIS) to increase awareness of forest elephant status and knowledge of their taxonomy.	Comms.	1	ANPN WCS Panthera	Results shared with MIKE and ETIS. Reports available.	See above	2019 (Start)

AEAP/GEAP Objective 5							Total (3 years):	US\$ 3,266,062 Secured FCFA 182,250,000	
Project Proposals*							Total (3 years):	US\$ 3,266,062	
Remaining budget							Total:	0	

*See RMP&B

Objective 6: STRENGTHEN COOPERATION AMONG RANGE STATES									
Target 6: Enforcement taskforce established for regional agencies by 2020.									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Start Final.
6.1	Official collaboration established at regional and international level to dismantle trafficking networks.	6.1.1	develop and sign official collaboration protocols with bordering countries including anti-poaching harmonization, joint actions, border controls, intelligence and data exchange and prosecution facilitation.	See Activity 2.3.4	1	ANPN	Official collaboration protocols with neighboring countries drafted and signed.	NA	2019 (Start)

		6.1.2	Implement patrols, joint seizures and border control with bordering countries	Joint border patrols for 4 national parks,	1	ANPN	Patrols, seizures and joint border controls with neighboring countries implemented.	External: US\$ 129,600	On-going
		6.1.3	Develop direct collaboration with law enforcement bodies in ivory transit and ivory consumer countries to further investigations and exchange information	Liaise with law enforcement agencies and NGOs of target countries	1	ANPN	Direct collaboration with law enforcement agencies in ivory transit countries and ivory consuming countries has been developed. MoU signed and available.	External: US\$ 32,400	2019 (Start)
		6.1.4	Rely on international organizations (INTERPOL, CEEAC) and existing networks (WEN, TRAFFIC, Giants' Club, etc.) to promote collaboration for elephant	Communication and international meetings	1	ANPN	Collaboration with international organizations for the conservation of elephants is effective.	External: US\$ 48,000	2019 (Start)

			conservation						
		6.1.5	Develop sample and/or data exchange networks with forensic laboratories in Africa and Asia to harmonize techniques at the international level.	Desk study, communication	1	ANPN	Networks for the exchange of samples and / or data with forensic laboratories in Africa and Asia have been developed to harmonize techniques at the international level.	NA	2019 (Start)
	AEAP/GEAP Objective 6 Remaining budget						Total (3 years):	US\$ 210,000	

Objective 7: IMPROVE COLLABORATION WITH LOCAL COMMUNITIES AND BROADEN REVENUE BASE BY DEVELOPING ELEPHANT-BASED TOURISM Target 7: By 2028, the revenue base is broadened to such an extent that both communities cohabiting with elephants as well as the State receive considerable benefits from elephant-based tourism.									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Final. (Dur)
7.1	Elephants seen as an attractive tourism product in Gabon.	7.1.1	Develop an elephant-based tourism strategy	Workshop/ Meetings	2	ANPN MoT WCS	Strategy available and circulated		2019 (Start)
								Required:	
								US\$ 13,936,773	
								Yr1: US\$ 7,991,441 Yr2: US\$ 3,023,631 Yr3: US\$ 3,001,701 Funding Proposal GA3 Target 7.1 All Activities	
		7.1.2	Promote a certain	Advertisement	2	ANPN	Contracts		On-

			number of tourism products to encourage private sector investment.	s in local and international papers		MoT WCS	with private sector investors	See above	going
		7.1.3	Build 10 ecotourism structures on flagship sites for mega fauna sighting.	Contractors	2	ANPN	Number of structures finished/time unit	See above	On-going
		7.1.4	Generate communication tools in order to promote Gabon as key (eco) tourism destination for foreign travellers.	Develop marketing strategy/consultants	2	ANPN MoT WCS	Communication tools/Marketing strategy developed	See above	On-going
7.2	Local communities benefit from tourism income	7.2.1	Strengthen the local community involvement in the decision-making process and the benefits of conservation (tourism) generated revenue.	Use CCGLs as platform for discussions and work out revenue sharing mechanism	22	ANPN	Sharing mechanism in place	See above	2019 (Start)
		7.2.2	Create jobs for local people in all the sectors linked to tourism		2	ANPN MoT	Number of local people employed	See above	2019 (Start)
7.3	Local communities benefit from tourism income	7.1.3	Train and hire local tourism guides	Broadcast using CCGLs, select and train	2	ANPN	Number of local guides trained	See above	On-going
	AEAP/GEAP Objective 7						Total: (3 years)	US\$ 13,936,773	

	Project Proposals*						Total (3 years):	US\$ 13,936,773	
	Remaining budget						Total:	0	

*see RMP&B

Objective 8: IMPLEMENT GABON'S NATIONAL ELEPHANT ACTION PLAN									
Target 8: 90% of Gabon's NEAP effectively implemented by 2022									
#	Target Description (Outcome)	#	Activity Description	Methods	Priority 1 (high) 5 (low)	Responsibility Implementers	Verification	Funding Secured FCFA Required (US\$)	Year Final. (Dur)
8.1	Establish a clear framework for NEAP implementation.	8.1.1	Appoint a NEAP coordinating committee (including a coordinator and central focal point)	Internal	1	ANPN	CC, coordinator and focal point in place	NA	On-going
		8.1.2	Publicize the NEAP and establish close and consistent relationships with partners	Communication	1	ANPN	NEAP published	NA	On-going
		8.1.3	Organize annual meetings between stakeholders and invite the NEAP coordinators from	Annual NEAP review workshops (3 days/workshop)	1	ANPN	Regular meetings held	External: US\$ 60,600	On-going

			neighboring countries.						
		8.1.4	Define the priority actions for the Gabonese government.	Desk job	1	ANPN		NA	On-going
		8.1.5	Define clear procedures for partners to coordinate activities and funding	Desk job	1	ANPN	Procedures developed and communicated	NA	On-going
8.2	Reinforce coordination between government institutions.	8.2.1	Define and clarify the roles and responsibilities of each institution in each NEAP objective, target and measure implementation.	Desk job	1	ANPN	Roles clarified	NA	On-going
		8.2.2	Establish official collaboration agreements for information exchange and coordinated action implementation for elephant conservation	MoU negotiated, discussed, and signed	1	ANPN	Agreements in place	NA	On-going
8.3	Reinforce collaboration with non-governmental partners and the private sector	8.3.1	Establish Memoranda of Understanding with transport carriers (SETRAG, ports, airports, transport	Liaise and negotiate	1	ANPN DGFAP Police Gendarmerie	MoUs in place	NA	2019 (Start)

			companies) and extractive industries.						
		8.3.2	Encourage the sharing of data relevant to elephant conservation between government institutions and their partners.	Communication	1	ANPN	Protocols developed	NA	2019 (Start)
		8.3.3	Coordinate activities carried out by Government institutions and NGOs to ensure results complementarity and circulation	Coordination	1	ANPN	Annual implementation meetings	NA	On-going
8.4	Follow progress on the implementation of priority actions	8.4.1	Work in collaboration with the funding bodies for the financing of priority actions	Communication and collaboration	1	ANPN	Regular communications	NA	On-going
		8.4.2	Develop procedures for monitoring and evaluating the implementation of government and partners activities	Regular implementation meetings	1	ANPN	M&E plan developed and communicated	NA	On-going
		8.4.3	Collect relevant reports and information for the NEAP and archive	Develop archive	1	ANPN	Database active	NA	On-going

			them in a central database						
		8.4.4	Provide an annual report of the implementation for the government and the funding bodies.	Write report	1	ANPN	Proceedings of implementation meetings circulated annually	NA	On-going
	AEAP/GEAP Objective 8 Remaining budget						Total (3 years):	US\$ 60,600	
	GEAP Objective 1						Total:	US\$ 33,121,862	
	GEAP Objective 2						Total:	US\$ 194,200	
	GEAP Objective 3						Total:	US\$ 16,963,833	
	GEAP Objective 4						Total:	US\$ 104,600	
	GEAP Objective 5						Total:	US\$ 3,266,062	
	GEAP Objective 6						Total:	US\$ 210,000	
	GEAP Objective 7						Total:	US\$ 13,936,773	
	GEAP Objective 8						Total:	US\$ 60,600	
	Gabon NEAP (3 years)						Total:	US\$ 67,857,930	
	Funding Proposals*						Total:	US\$ 50,892,124	
	Remaining budget						Total:	US\$ 16,965,806	
	Secured:						Total:	FCFA 15,571,150,235	

*See RMP&B



RESOURCE MOBILIZATION PLAN & BUDGET (MEDIUM TERM; 3 YEARS)

NEAP – Resource Mobilization Plan and Budget (Medium Term – 3 years)										
Activity	Project #/Name	Target(s)	Main Tasks	Lead Partner	Source of Financing	Budget (Yr.)			Total	Shortfall
						1	2	3		
Objective 1: PROTECT ELEPHANT POPULATIONS BY MINIMIZING POACHING AND IVORY TRADE										
Activity										
1.2.2 Target 1.2	Annex 1 (GA1) Provided optimum human resources for Gabon's National Parks (Strengthening law enforcement)	Gabon's 13 national parks have sufficient patrol staff, equipment and operational budget to implement the surveillance strategy by 2023	<ol style="list-style-type: none"> 1. Recruit 425 eco-guards and 75 assistant conservation officers, 2. Train staff 3. Evaluate equipment needs, 4. Provide equipment 5. Provide adequate budgets for each site 6. Deploy teams 	ANPN	ANPN (FCFA) External (US\$)	691840000 2,682,544	444570000 5,195,952	339300000 8,846,960	1475710000 16,725,456	 16,725,456
#						00.00	00.00	00.00	00.00	00.00

#						00.00	00.00	00.00	00.00	00.00
Objective 1 (3 years): Total:						2,682,544	5,195,952	8,846,960	16,725,456	16,725,456
ANPN Contribution (FCFA):						691840000	444570000	339300000	1475710000	
Objective 2: Insert										
Activity										
#						00.00	00.00	00.00	00.00	00.00
#						00.00	00.00	00.00	00.00	00.00
#						00.00	00.00	00.00	00.00	00.00
Objective 2: Total						00.00	00.00	00.00	00.00	00.00
Objective 3: MITIGATE AND SUSTAINABLY MANAGE HUMAN-ELEPHANT CONFLICT										
Activity										
All Targets 3.1 – 3.5	Annex 2 (GA2) Mitigating human-elephant conflict in Gabon	1. Crop depredation at acceptable levels 2. Increased knowledge on HEC 3. Numbers of elephants killed legally decreased 4. Vet team	1. Recruit & train decentralized HEC teams 2. Set up reporting & monitoring system 3. Install fences 4. Recruit & train communit	ANPN DGFAP	External (US\$) ANPN (FCFA)	6,300,476	5,909,973	5,890,624	18,101,073 631,800,235 (1,137,240)	16,963,833

		operation 5. Attitude communit ies changed	y eco- guards 5. Assemble vet team							
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 3 (3 years): Total:						6,300,476	5,909,973	5,890,624	18,101,073	16,963,833
ANPN Contribution (FCFA):						631,800,235				
Objective 4: Insert										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 4: Total						00.00	00.00	00.00	00.00	00.00
Objective 5: CONDUCT RESEARCH AND MONITORING TO SUPPORT CONSERVATION DECISIONS WITH SCIENTIFIC EVIDENCE										
Activity										
Targets 5.1 – 5.5	Annex 4 (GA4)	1. Elephant scientific monitorin g unit operation al and deployed	1. Build consortiu m 2. Compile database 3. Identify main populatio n blocks 4. Update	ANPN WCS Panther a	External Sourced: ANPN	1,088,687 60,750,000	1,088,687 60,750,000	1,088,687 60,750,000	3,266,062 182,250,000	3,266,062
All Activities	Inventory and monitoring of Gabon’s elephant populations	2. Permanen t monitorin								

		g of priority sites 3. New national population survey and trends over 10 years available by 2028	database 5. Test, compare most suitable methods 6. Establish key population monitoring 7. Assemble and deploy teams 8. Mechanism to process and transfer data							
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 5 (3 years) : Total						1,088,687	1,088,687	1,088,687	3,266,062	3,266,062
ANPN Contribution (FCFA):						60,750,000	60,750,000	60,750,000	182,250,000	
Objective 6: Insert										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00

#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 6: Total						00.00	00.00	00.00	00.00	00.00
Objective 7: IMPROVE COLLABORATION WITH LOCAL COMMUNITIES AND BROADEN REVENUE BASE BY DEVELOPING ELEPHANT-BASED TOURISM										
Activity										
7.1.5	Annex 3 (GA3) New elephant-based tourism destinations launched in Gabon's National Parks	1. By 2021, Gabon is considered an attractive tourist destination 2. Private sector investment for tourist lodges in all parks obtained 3. By 2023, all parties involved contribute to an increase in the quality of life for communities	1. Select tourism products and circuits 2. Prepare sites 3. Recruit & train eco-guides 4. Recruit & train hospitality staff 5. Build ten structures in selected parks 6. Set up evacuation and security procedures 7. Marketing	ANPN	External	7,911,441	3,023,631	3,001,701	13,936,773	13,936,773

		ies living near the parks								
		4. People of Gabon support elephant conservation								
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 7 (3 years): Total:						7,911,441	3,023,631	3,001,701	13,936,773	13,936,773
Objective 8: Insert										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 8: Total						00.00	00.00	00.00	00.00	00.00
Total NEAP Budget Requested US\$ (3 years):						17,983,148	15,218,243	18,827,972	52,029,364	50,892,124
									-631,800,235	
GG Contribution (FCFA):						(752590000)	(505320000)	(400050000)	(1657960000)	

- 1 FCFA = 0,0018 US\$ (10/05/18)

RESOURCE MOBILIZATION PLAN & BUDGET (3, 5 & 10 YEARS)

NEAP – Resource Mobilization Plan and Budget (Medium to Long Term – 3, 5 & 10 years)										
Activity	Project #/Name	Target(s)	Main Tasks	Lead Partner	Source of Financing	Budget (Yr.)			Total	Shortfall
						3	5	10		
Objective 1: PROTECT ELEPHANT POPULATIONS BY MINIMIZING POACHING AND IVORY TRADE										
Activity										
1.2.2	Annex 1 (GA1)	Gabon's 13 national parks have sufficient patrol staff, equipment and operational budget to implement the surveillance strategy by 2023	<ol style="list-style-type: none"> Recruit 425 eco-guards and 75 assistant conservation officers, Train staff Evaluate equipment needs, Provide equipment Provide adequate budgets for each site Deploy teams 	ANPN	ANPN (FCFA)	1475710000	1954240000	1954240000	1954240000	
Target 1.2	Provided optimum human resources for Gabon's National Parks (Strengthening law enforcement)				External (US\$)	16,725,456	43,074,265	72,105,941	72,105,941	72,105,941
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00

Objective 1 (3, 5 & 10 years accumulative) Requested US\$: Total:										
						16,725,456	43,074,265	72,105,941	72,105,941	72,105,941
GG Contribution (FCFA):										
						1475710000	1954240000	1954240000	1954240000	
Objective 2: <i>Insert</i>										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 2: Total						00.00	00.00	00.00	00.00	00.00
Objective 3: MITIGATE AND SUSTAINABLY MANAGE HUMAN-ELEPHANT CONFLICT										
Activity										
All	Annex 2 (GA2)	1. Crop depredation at acceptable levels	1. Recruit & train decentralized HEC teams	ANPN	External	18,101,073	29,804,921	29,804,921	29,804,921	
Targets 3.1 – 3.5	Mitigating human-elephant conflict in Gabon	2. Increased knowledge on HEC	2. Set up reporting & monitoring system	DGFAP	(US\$)	631,800,235	-			28,667,681
		3. Numbers of elephants killed legally decreased	3. Install fences		ANPN	(1,137,240)				
		4. Vet team operational Attitude	4. Recruit & train community eco-guards		(FCFA)					
			5. Assemble vet team							

		communitie s changed								
#			▪			00.00	00.00	00.00	00.00	00.00
#			▪			00.00	00.00	00.00	00.00	00.00
Objective 3 (3 & 5 years accumulative) Requested US\$: Total:						18,101,073	29,804,921	29,804,921	29,804,921	28,667,681
GG Contribution (FCFA):									-1053000391	
									(1,895,401)	
Objective 4: Insert										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 4: Total						00.00	00.00	00.00	00.00	00.00
Objective 5: CONDUCT RESEARCH AND MONITORING TO SUPPORT CONSERVATION DECISIONS WITH SCIENTIFIC EVIDENCE										
Activity										
Targets 5.1 – 5.5	Annex 4 (GA4)	4. Elephant scientific monitoring unit operational and deployed	9. Build consortium	ANPN	External	3,266,062	5,295,494	10,078,868	10,078,868	10,078,868
All Activities	Inventory and	5. Permanent	10. Compile database	WCS						
			11. Identify main population blocks	Panther a	ANPN	182,250,000	243,000,000	486,000,000	486,000,000	

	monitoring of Gabon's elephant populations	monitoring of priority sites New national population survey and trends over 10 years available by 2028	12. Update database 13. Test, compare most suitable methods 14. Establish key population monitoring 15. Assemble and deploy teams 16. Mechanism to process and transfer data		Sourced:					
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00
Objective 5 (3, 5 & 10 years accumulative) Requested US\$: Total						3,266,062	5,295,494	10,078,868	10,078,868	10,078,868
						182,250,000	243,000,000	486,000,000	486,000,000	
Objective 6: Insert										
Activity										
#		▪	▪			00.00	00.00	00.00	00.00	00.00
#		▪	▪			00.00	00.00	00.00	00.00	00.00

#						00.00	00.00	00.00	00.00	00.00
Objective 6: Total						00.00	00.00	00.00	00.00	00.00
Objective 7: IMPROVE COLLABORATION WITH LOCAL COMMUNITIES AND BROADEN REVENUE BASE BY DEVELOPING ELEPHANT-BASED TOURISM										
Activity										
7.1.5	Annex 3 (GA3) New elephant-based tourism destinations launched in Gabon's National Parks	<ol style="list-style-type: none"> 1. By 2021, Gabon is considered an attractive tourist destination 2. Private sector investment for tourist lodges in all parks obtained 3. By 2023, all parties involved contribute to an increase in the quality of life for communities living near the parks 4. People of Gabon support 	<ol style="list-style-type: none"> 1. Select tourism products and circuits 2. Prepare sites 3. Recruit & train eco-guides 4. Recruit & train hospitality staff 5. Build ten structures in selected parks 6. Set up evacuation and security procedures 7. Marketing 	ANPN	External	13,936,773	19,940,175	19,940,175	19,940,175	19,940,175

		elephant conservation								
#						00.00	00.00	00.00	00.00	00.00
#						00.00	00.00	00.00	00.00	00.00
Objective 7 (3 & 5 years accumulative) Requested US\$: Total:						13,936,773	19,940,175	19,940,175	19,940,175	19,940,175
Objective 8: Insert										
Activity										
#						00.00	00.00	00.00	00.00	00.00
#						00.00	00.00	00.00	00.00	00.00
#						00.00	00.00	00.00	00.00	00.00
Objective 8: Total						00.00	00.00	00.00	00.00	00.00
Total NEAP Budget Requested US\$ (3, 5 & 10 years accumulative):						52,029,364	98,114,855	131,929,905	131,929,905	130,792,665
						631,800,235				
						(1,137,240)				
ANPN Contribution (FCFA):							2197240000	2440240000	2440240000	
						1657960000				