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African Elephant Fund

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United Nations Environment Programme

African Elephant Fund:

Transforming Strategies into Action

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"

Elephants are vital to our ecosystem. Yet the population of elephants is steadily dwindling, by almost 8 per cent every year. We must step up efforts to manage and protect our biodiversity, including the African elephant. "

Erik Solheim
Head
United Nations Environment Programme

Photo Credit: Aimee Vogelsang | Unsplash

Acknowledgements:

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Acronyms

AEF	African Elephant Fund
AEAP	African Elephant Action Plan
AfESG	African Elephant Specialist Group
AESR	African Elephant Status Report
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COMIFAC	Central African Forests Commission
EAC	East African Community
ECOWAS	Economic Community of West African States
IUCN	International Union for Conservation of Nature
KWS	Kenya Wildlife Service
LATF	Lusaka Agreement Task Force
MIKE	Monitoring of Illegal Killing of Elephants
SADC	Southern African Development Community
WCS	Wildlife Conservation Society

Foreword

The ever-increasing threats to African elephant populations jeopardizes their protection and harmonious coexistence with humans. These threats are exponentially increasing, resulting in declining populations, an increase in conflicts between humans and elephants, fragmentation, and loss of habitat. To address these alarming concerns, range States are making concerted efforts to implement conservation management strategies coupled with political commitments, with the aim of securing a future for African elephants and their habitats.

Range States are taking a number of fundamental steps to ensure the effective conservation and management of elephants. These include taking steps to effectively implement the African Elephant Action Plan. The Action Plan is a framework for the prioritization of objectives, strategies and activities that address threats to Africa's elephants.

While the illegal killing of elephants and the illegal trade in ivory have been identified as the primary immediate threat to elephant populations in Africa, it is equally important to acknowledge the escalating loss of elephant habitats due to urbanization. In light of these concerns, the Action Plan represents a crucial step towards improving and strengthing national initiatives designed to ensure the continent-wide protection and conservation of the species.

The African Elephant Fund, which is a partnership venture between the United Nations Environment Programme, the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, donor States and range States, have been working together to curtail the growing threats to elephant populations. Efforts to meet this objectve have been stepped up since the adoption of the Action Plan in 2010.

In all, 37 projects have been implemented with the funding support from the African Elephant Fund with a view to effectively implement the Action Plan. These include measures to reduce the illegal killing of elephants and illegal trade in elephant products, maintain elephant habitats, and reduce human-elephant conflicts. These projects primarily involve intiatives that aim to enhance communication and awareness-raising, improve information and knowledge sharing, incorporate improved technological techniques, develop national plans and agreements, stengthen cooperation at political and economic levels, and enhance the capacities of law enforecement authorities as well as local communities.

The lessons learned and recommendations outlined in this publication offer comparative strategies for possible replication in implementing the Action Plan, serving potentially as a critical resource for policymakers, development practitioners and those involved in the conservation of elephants. It is hoped that country initiatives such as these will continue to be developed and lend further momentum to national and regional efforts to strengthen elephant conservation.

Elizabeth Maruma Mrema

Director, Law Division
United Nations Environment Programme
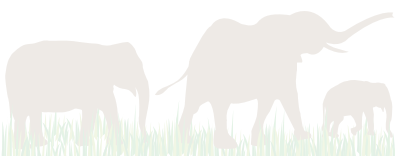
Preface

The alarming and dispiriting truth about the African elephant is that this species, which is considered so majestic and charismatic and a source of considerable economic, cultural and aesthetic value, now faces possible extinction. What is equally shocking is that we humans are the main culprits responsible for this state of affairs.

The competition between humans and wildlife for space, combined with the rising demand for ivory in our society, the race for development and the scramble for the Earth's natural capital, is inevitably leading to the depletion and destruction of our ecosystems.

As more and more species are becoming vulnerable to extinction, resolute action absolutely must be taken to ensure the preservation of our natural heritage and nature's diverse creatures. National and continent-wide strategies must be put into effect and there must be a universal resolve to enforce stringent measures for the conservation and sustainable management of elephants. The African Elephant Action Plan (AEAP) is a prime example of the measures that have been agreed upon by all 37 African elephant range States for the protection of African elephants and their habitats. The AEAP outlines the objectives, strategies, and activities which must be addressed for the effective conservation of elephants across their entire range in Africa.

With the adoption of the AEAP by range States and the establishment of the African Elephant Fund, countries are becoming increasingly resilient in responding to pressures that threaten their elephant populations. By pursuing the objectives of the AEAP, implementing sound elephant management strategies and strengthening cooperation both within range States and internationally, it is possible to save our elephants for future generations.

While some countries have experienced slight increases in their elephant populations, others are still reporting drastic declines: that too is a call for more resolute action. The African elephant range States and the international community must work together to protect and conserve our elephants. There is strength in numbers and, as the African proverb goes, "if you want to go quickly go alone. If you want to go far, go together."

Together, we can save Africa's most precious species.

Patrick Omondi

Chair, African Elephant Fund Steering Committee
Acting Director, Resources Survey and Remote Sensing,
State Department of Natural Resources, Kenya

Executive summary

Elephants are considered a keystone species that plays a critical role in the management and preservation of biodiversity within the ecosystem. Important and beneficial, they are responsible for clearing fields, fertilizing soils by spreading seeds in their dung and maintaining the diversity of flora and fauna in our ecosystems.

> An estimated **20,000** to **25,000** elephants are killed per year out of a population of **420,000** to **650,000**.
>
> (UN Environment, 2014)

The two recognized subspecies of African elephants are the savanna elephant (Loxodonta africana africana) and the forest elephant (Loxodonta africana cyclotis). The savanna elephant is found in the savanna grasslands of Eastern, Southern and Western Africa, with the largest remaining populations in the East found in Kenya and the United Republic of Tanzania, in the South in Botswana and South Africa and in the West in Benin and Burkina Faso. The tropical forests of Central Africa are home to most of the continent's forest elephants, with the largest known remaining populations in Congo and Gabon (Thouless, 2016, p. 7).

All of the forest and savanna elephants of Africa are found in the 37 African elephant range States, which are:

African elephant range States are grouped by subregion. The following four subregions have been defined:

Central Africa
Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea and Gabon;

East Africa
Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Uganda and the United Republic of Tanzania;

Southern Africa
Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe;

West Africa
Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo

Amboseli National Park, Kenya
Photo Credit: Wikimedia Commons

What is the African elephant problem?

Elephants are rapidly disappearing from African landscapes.

The high numbers of illegal killings of African elephants and the rising illegal trade in ivory have resulted in the severe decline of populations of this species across the continent. At the same time, human-elephant conflict and the loss and fragmentation of elephant habitats due to the expansion of the human population and land conversion have exacerbated the decline in elephant populations in many parts of Africa.

An estimated 20,000 to 25,000 African elephants are killed each year from estimated populations of 420,000 to 650,000 (UN Environment, 2014, p. 7). Although there has been a reduction and stabilization of the numbers of illegal killings witnessed in recent years, reports from 2016 demonstrate that poaching rates remain higher than the normal growth rate of elephant populations (CITES, 2016, p. 3). Unless this dire situation is addressed immediately, the entire species could disappear within a generation.

Why does the problem exist?

As the largest terrestrial animal whose distribution across the continent makes it difficult to estimate its population or carry out comprehensive studies of its nature and habits, a thorough understanding of the elephant is a high priority to ensure informed conservation and management. Research on African elephants is limited by a range of problems, such as the difficulty of acquiring information because of their vast range, the variety of habitats that inhibit visibility, and limited human and financial capacity (IUCN, 2005). Nevertheless, the charismatic appeal of the species and their intrinsic value, which in many range States generates profits from ecotourism, has been exploited in recent years, in particular in the illegal elephant ivory trade. The illegal killing of elephants for ivory and for meat poses a growing threat to elephant populations in Africa (IUCN, 2005).

Furthermore, the staggering decline in elephant populations can be attributed to the increased habitat loss and fragmentation. Demographic pressures such as swelling human populations, the expansion of human settlements, land conversions for human activities and industrial developments have caused exponential declines in most of the African elephant range States (IUCN, 2005).

The illegal killing and the fragmentation and loss of habitats resulting from pressures on existing elephant habitats pose an increased risk to elephant population survival (United Nations Environment Programme et al. 2013, p. 15). Although some populations, primarily in countries in the Eastern and Southern Africa region have remained stable, for some range States in Central and Western Africa, the killing rate far exceeds the natural elephant birth rates and this is putting populations at risk of extinction (CITES, 2013, p. 5). The local populations of elephants in Central Africa in Guinea-Bissau and Senegal are now on the brink of extinction (Thouless, 2016, p. 34).

Figure 1: African elephant population estimates as reported in the Great Elephant Census and IUCN from the past 500 years, from the 1500s to 2016.

1500s: 26.000.000   1913: 10.000.000
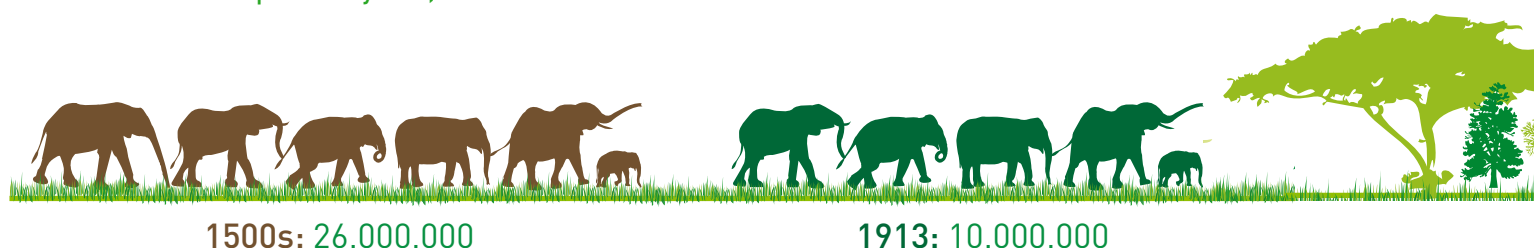
Despite the efforts made by range States to devise strategies and develop measure for actions to combat threats to their elephants' survival, the limitations caused by political, economic and social factors across the continent have severely hindered progress. The limited political will, institutional weaknesses, poor governance, ineffective adherence to rule of law, limited human capacity and technical expertise and financial constraints are impeding efforts and commitments by the countries to further their initiatives for the conservation of elephants (IUCN, 2005).

Solution

The African Elephant Action Plan (AEAP) was developed by the African elephant range States pursuant to instructions adopted at the fourteenth meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (The Hague, 2007) (Rev. CoP14). The Plan was finalized and approved as a consensus document by all 37 African elephant range States in the margins of the fifteenth meeting of the CITES Conference of the Parties (Doha, 2010) (Rev. CoP15).

Savanna elephant populations declined by 30 percent (equal to 144,000 elephants) between 2007 and 2014.

The current rate of decline is 8 percent per year, primarily due to poaching. The rate of decline accelerated from 2007 to 2014.

352,271 elephants were counted in the 18 countries surveyed. This figure represents at least 93 percent of savanna elephants in these countries.

Eighty-four percent of the population surveyed was sighted in legally protected areas while 16 percent were in unprotected areas. However, high numbers of elephant carcasses were discovered in many protected areas, indicating that elephants are struggling both inside and outside parks.

Source: Final Report, Great Elephant Census, 2016 (http://www.greatelephantcensus.com/final-report/)

With the adoption of the AEAP, range States have strengthened their collaboration and cooperation in addressing the prioritized objectives to secure the future of elephant populations and their habitat. The priority objectives identified in the AEAP are the following:

1. To reduce illegal killing of elephants and illegal trade in elephant products;
2. To maintain elephant habitats and restore connectivity;
3. To reduce human-elephant conflict;
4. To increase awareness of elephant conservation and management of key stakeholders, including policymakers and local communities, among other interest groups;
5. To strengthen knowledge among range States on the management of the African elephant;
6. To strengthen cooperation and understanding among range States;
7. To improve cooperation and collaboration among local communities on African elephant conservation;
8. To effectively implement the African Elephant Action Plan.

1979: 1.300.000   **1979:** 1.300.000   **2006:** 500.000   **2015:** 400.000

The African Elephant Fund was established as a funding mechanism for implementing the AEAP (Rev. CoP15). It has been providing funding for projects across the continent to all African elephant range States to promote effective implementation of the AEAP in managing the conservation of elephants. In addition, the African Elephant Fund is focused on enhancing the monitoring and reporting of activities outlined in the AEAP, and on providing a sustainable mechanism for mobilizing resources.

Current strategies using the latest developments in tools and technology have been instrumental in deepening understanding of elephant populations, movements and trends, streamlining processes and improving knowledge management, and in creating better informed policy and regulations. At the same time, the commitments entered into by enforcement, wildlife management and customs authorities have ensured fully operational anti-poaching and border patrolling.

Structure of the handbook

The projects highlighted in the present handbook explore the current methods and strategies employed by African elephant range States to address the threats to their elephant populations. Although their initiatives vary from country to country, their projects have succeeded in protecting their elephant populations, in mitigating human-elephant conflict, in negotiating improved wildlife laws and policies, in improving the livelihoods of affected populations in close proximity to elephants, and in developing new technologies for the better monitoring and tracking of elephants.

In each chapter of the handbook, the objectives of the AEAP are discussed and the strategies identified in its eight objectives are explored through the projects implemented in the regions. Moreover, through an evaluation of these projects the African Elephant Fund Secretariat has been able to prepare a list of recommendations to enhance effective implementation of the AEAP for future projects relating to conservation of the African elephant.
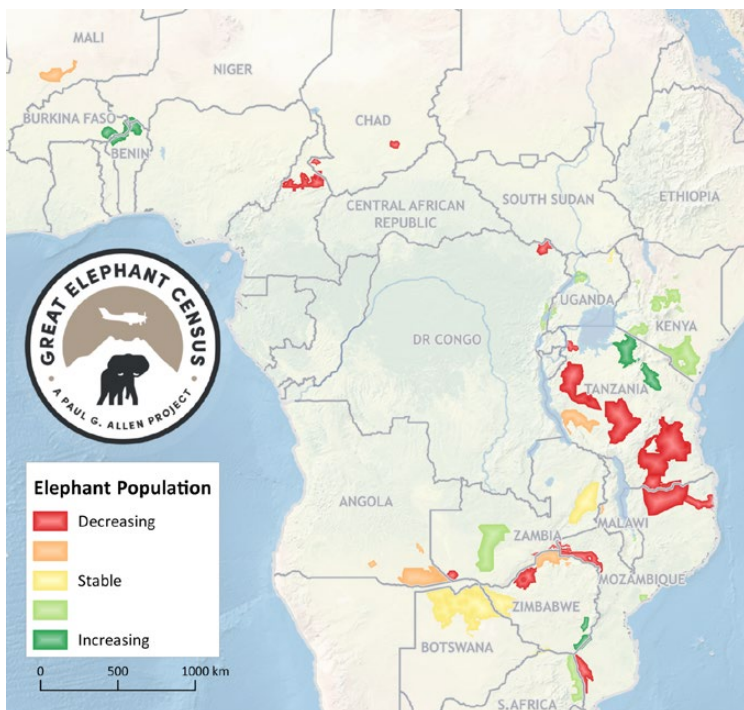
Elephant population trends in GEC landscapes over the past ten years based on GEC data and comparable previous surveys (methodology in Chase et al. 2016). Red landscapes declining →5%/year, orange declining 2-5%/year, yellow declining or increasing ←2%/year, pale green increasing 2-5%/year, dark green increasing →5%/year.
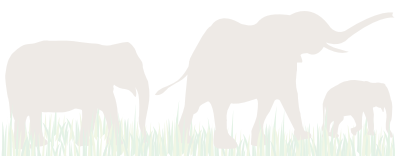
African Elephant Action Plan

Background

During the fourteenth meeting of the Conference of the Parties to CITES, held in The Hague in 2007, decisions 14.75–14.79 regarding the African elephant (Loxodonta africana) were adopted in recognition of the immediate action required to ensure the effective protection of the habitats and populations of Africa's remaining elephants.

Decisions 14.75–14.79 mandated the African elephant range States, among other things, to develop an African Elephant Action Plan and African Elephant Fund.

Decisions 14.75–14.79:

Directed to African elephant range States

14.75 The African elephant range States shall continue their constructive elephant dialogue aiming to develop joint conservation policies and exchange of management experience in order to improve the management of elephant populations.

The African elephant range States through the African elephant dialogue process shall develop an overall African elephant action plan for improved elephant management aiming at:

(a) Accessing and directing resources, towards strengthening enforcement capacity in African elephant range States to combat poaching and illegal trade in ivory;
(b) The implementation of the Action plan for the control of trade in elephant ivory; and
(c) Enhancing capacity building, managing translocations, reducing human elephant conflicts and enhancing community conservation programmes and development programmes within or adjacent to the elephant range.

The elephant range States will report to the Standing Committee on progress made under this decision with a view to providing the information necessary for the reviews referred to in Decision 14.78.

Directed to Parties, intergovernmental organizations and non-governmental organizations

14.76 Parties, trading countries, the ivory carving industry, intergovernmental

Organizations, non-governmental organizations and other donors are called upon to contribute significantly to the African Elephant Fund for the implementation of the African elephant action plan and the programme for Monitoring the Illegal Killing of Elephants (MIKE) to ensure their establishment and maintenance.

Directed to the Standing Committee

14.77 The Standing Committee, assisted by the Secretariat, shall propose for approval at the latest at the 16th meeting of the Conference of the Parties a decision making mechanism for a process of trade in ivory under the auspices of the Conference of the Parties.

14.78 The Standing Committee shall conduct ongoing comprehensive reviews of the status of the elephant, trade in its specimens and the impact of the legal trade, based on data from MIKE, the Elephant Trade

Information System and the implementation of the Action plan for the control of trade in elephant ivory and the African elephant action plan referred to in.

Directed to the Secretariat

14.79 The Secretariat shall establish an African Elephant Fund that will be applied to the implementation of the African elephant action plan.

The Secretariat shall establish a steering committee consisting of representatives of the range States and donors to govern the African Elephant Fund and to support and advise African elephant range States on the implementation of the Action Plan.

The Steering Committee shall decide on the organization of the administration of the fund.

Photo Credit: Cristy Zinn | Unsplash

African Elephant Action Plan priority objectives and the Sustainable Development Goals
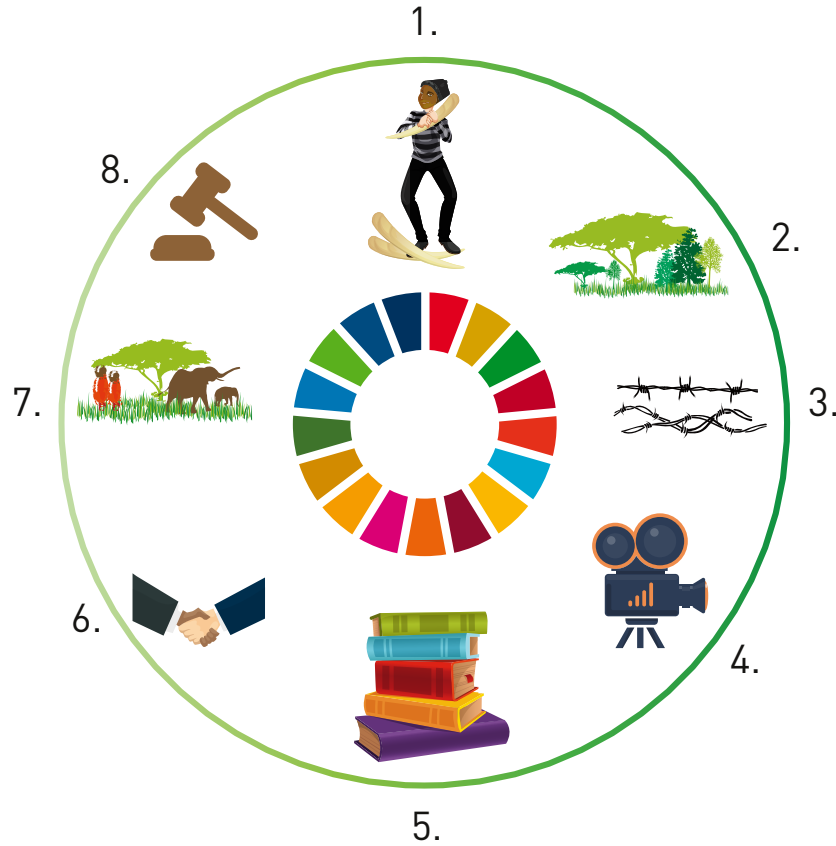
African Elephant Action Plan Priority Objectives	Links with the Sustainable Development Goals
1. Reducing illegal killing and illegal trade in ivory	**1** NO POVERTY · **15** LIFE ON LAND · **16** PEACE, JUSTICE AND STRONG INSTITUTIONS
2. Maintaining elephant habitats and restoring connectivity	**13** CLIMATE ACTION · **15** LIFE ON LAND
3. Reducing human-elephant conflict	**1** NO POVERTY · **2** ZERO HUNGER · **3** GOOD HEALTH AND WELL-BEING · **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE · **11** SUSTAINABLE CITIES AND COMMUNITIES · **15** LIFE ON LAND · **16** PEACE, JUSTICE AND STRONG INSTITUTIONS
4. Increasing awareness on elephant conservation and management of key stakeholders that include policy makers and local communities.	**1** NO POVERTY · **11** SUSTAINABLE CITIES AND COMMUNITIES · **15** LIFE ON LAND
5. Strengthening range States knowledge on elephant management	**13** CLIMATE ACTION · **15** LIFE ON LAND · **16** PEACE, JUSTICE AND STRONG INSTITUTIONS · **17** PARTNERSHIPS FOR THE GOALS
6. Strengthening cooperation and understanding among range States	**17** PARTNERSHIPS FOR THE GOALS
7. Improving local communities' cooperation and collaboration for African elephant conservation	**1** NO POVERTY · **2** ZERO HUNGER · **3** GOOD HEALTH AND WELL-BEING · **11** SUSTAINABLE CITIES AND COMMUNITIES · **15** LIFE ON LAND
8. Implementing the African Elephant Action Plan effectively	**15** LIFE ON LAND · **16** PEACE, JUSTICE AND STRONG INSTITUTIONS · **17** PARTNERSHIPS FOR THE GOALS

African Elephant Fund at a glance

Recognizing the increasing threats to the future of Africa's elephants, the African Elephant Fund was established to support the African elephant range States in executing the African Elephant Action Plan and, in that process, carrying out strategies for protecting and restoring elephant populations and their habitats.

The Fund aims to reduce: poaching, the illegal trade in ivory, habitat loss and fragmentation, human-elephant conflicts, and the threats to livelihoods faced by enforcement authorities and fringe communities.

During their implementation of the AEAP projects, some of the Fund's initiatives have included enhancing the technical knowledge on the elephant species and its distribution across the continent, boosting the exchange of information and expertise on elephant management, strengthening wildlife enforcement in the field, and reinforcing institutional frameworks to support the regulatory and prosecutorial action for wildlife protection and against wildlife crime.

African Elephant Fund Secretariat

Since February 2011, the United Nations Environment Programme (UN Environment) has been performing the Secretariat functions for the African Elephant Fund, for the implementation of the AEAP. As custodians of the contributions from donors and partners, the African Elephant Fund Secretariat ensures access to resources for conservation and management of elephants by the 37 African elephant range States.

The Secretariat runs the day-to-day administration of the Fund, which includes:

- Overseeing project implementation;
- Receiving and accounting for the voluntary contributions to the Fund;
- Preparing and disseminating periodic programmatic and financial reports;
- Developing awareness-raising initiatives;
- Developing strategic resolutions and agendas for promoting international interventions for elephant conservation;
- Planning and organizing the AEAP project proposal submissions from range States;
- Coordinating the annual African Elephant Fund Steering Committee meetings.

African Elephant Fund Steering Committee

The African Elephant Fund Steering Committee consists of eleven member States: eight African elephant range States – two from each sub-region and three from the donor States. UN Environment, as the host of the Fund, and the CITES Secretariat participate in the African Elephant Fund Steering Committee as ex officio members. The African Elephant Fund Steering Committee oversees administration of the Fund in addition to supporting and advising the range States on the implementation of the AEAP.

The eight members of the Steering Committee from the African elephant range States are elected by African Elephant range States, while the three donor State members are elected for membership based on their minimum donation of $50,000 to the Fund. Members can serve for a three-year renewable term for up to a maximum of two consecutive terms. The current Steering Committee of the Fund is composed of representatives from Eastern, Central, Southern and Western Africa, donors and ex officio members with the following standing members:

REGIONS	REPRESENTATIVES	REPRESENTATIVES	
Eastern	Kenya – Patrick Omondi (Chair)	Ethiopia – Dawud Mume (Vice Chair)	
Central	Congo – Roger Albert Mbete	Gabon – Lee White	
Southern	South Africa – Thea Caroll, Sonja Mientjes	Botswana – Cyril Taolo	
Western	Burkina Faso – Benoit Doamba	Ghana – Kofi Nana Du-Nsiah	
Donors	Belgium – Miet Van Looy	Germany – Frank Barsch	Netherlands – Marcel Van Nijnatten
Ex-officio members	CITES Secretariat/Monitoring the Illegal Killing of Elephants (MIKE) programme – Tom de Meulenaer	UN Environment – Mamadou Kane	

Collectively, the Fund's Secretariat and its Steering Committee ensure the effective implementation of the AEAP by enhancing the national and interstate efforts of the range States to conserve elephant populations.

They do this by:

- Calling for proposals
- Evaluating and approving projects for funding
- Ensuring adherence to reporting requirements and to appropriate monitoring and evaluation methods for projects funded under the AEAP
- Awareness-raising and promoting outreach strategies
- Encouraging projects funded from outside the Fund which are compatible with the AEAP in monitoring the overall implementation of the AEAP
- providing guidance on areas that require priority funding
- informing African elephant range States, donors, stakeholders and the public on progress in the implementation of the AEAP.

Looking ahead: overcoming challenges and seeking opportunities

In all African range States, implementing the AEAP has had its share of challenges and successes. Even though work has been conducted in collaboration with partners and range States, the effectiveness of strategies and activities for elephant conservation has been weakened by limitations on national capacities and community apathy towards conservation.

These challenges are predominantly attributable to the lack of adequate human, financial and technical expertise, limited knowledge, poor governance, ineffective implementation of the rule of law, lack of political will, and frequent discord between policies related to urbanization and conservation and the evolving national development priorities.

At the same time, at the Secretariat level, operational challenges have been faced primarily due to inadequate compliance by the range States in the monitoring and reporting of projects, which makes it harder for the Secretariat to collect information and provide updates for the donors. In ensuring that range States and collaborators address the growing threats to elephant populations to overcome challenges that hamper progress, efforts have been focused on enhanced transparency, increased sharing of information, improved cohesiveness and bolstered partnerships in seeking opportunities for the effective implementation of the AEAP.

Moreover, collective efforts have been stepped up to tackle these issues by consolidating priorities and bringing together national and international development for social, economic and environmental concerns. By developing a cohesive approach, solving these challenges will require identifying the links between the environment and the social and economic factors underlying these issues, to enable divergent priorities to be brought under overall shared goals (Agenda 2030 and the Sustainable Development Goals). It is only through universal cooperation and collaboration in addressing the major threats to a sustainable future within our world that the protection of our planet, its people and the biodiversity within it can be achieved. Achieving the universally recognized SDGs will mark a tangible step towards ensuring not only the future sustainability of African elephant populations, but also to creating worldwide peace and prosperity.

Country	Number of Projects	Total funds allocated $
Angola	1	50,000
Benin	1	57,000*
Botswana	1	34,000
Burkina Faso	2	$81,650
Cameroon	1	*
Central African Republic	1	*
Congo	2	154,898
Cote d'Ivoire	1	90,160
Ethiopia	4	146,450
Gabon	2	164,599
Ghana	2	290,426
Kenya	3	134,828
Malawi	2	62,433
Mali	2	110,950
Mozambique	1	153,000
Namibia	1	75,681
Niger	1	24,650*
Nigeria	3	49,070
Rwanda	1	*
South Sudan	1	*
Uganda	1	31,844
United Republic of Tanzania	2	68,315
Zambia	3	121,250

*Some figures do not reflect the total amount or are unavailable as some projects were trans-boundary and thus the funding was shared.
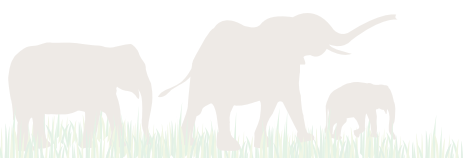
In the regions

The Fund has implemented AEAP projects in all regions which include African elephant range States: Eastern, Central, Southern and Western Africa. To date, 37 projects have been approved by the Steering Committee to 23 countries: Angola, Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Kenya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, South Sudan, Uganda, United Republic of Tanzania and Zambia.

These countries have implemented projects with much success, but much more needs to be accomplished to ensure a sustainable future for Africa's elephants. Increased regional integration, cooperation and collaboration at all levels must be attained with a view to furthering this momentum.
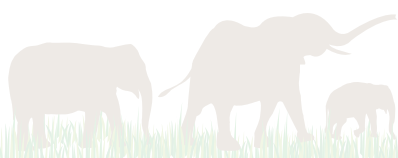
Photo Credit: Pexelbay

Road map to the African Elephant Action Plan

The following pages will introduce the eight objectives of the AEAP. The reasons for which the objective is of priority will be highlighted, as will the strategies devised for mitigating the problem. Each chapter will then provide a snapshot of the implementation of the AEAP on the ground by examining selected projects supported by the African Elephant Fund. Following which, the Secretariat presents its recommendation on how projects in the range States may be replicated or scaled up, with an accompanying list of suggestions on how better to meet each priority objective.

The recommendations in this publication are drawn from a range of sources, including CITES, the IUCN Species Survival Commission (SSC) African Elephant Specialist Group, and project reports by range States submitted to the African Elephant Fund and associated activities proposed in the AEAP.

AEAP	Country case studies:
Objective 1: reduce the illegal killing of elephants and the illegal trade in elephant products.	• **Nigeria** - supporting SMART ranger patrols at Yankari Game Reserve to strengthen law enforcement and reduce elephant poaching. • **Ethiopia** - at a national level, combating the illegal trade in elephant ivory, improving field intelligence and the capabilities for the investigation of ivory and other wildlife crimes and law enforcement operations, and providing workshops and capacity-building in southern Ethiopia.
Objective 2: maintain elephant habitats and restore connections between them.	• **Namibia** - aerial survey of elephants in the north-west of the country. • **Kenya** - the impact of poaching on elephants and threats to elephants in the Tsavo-Mkomazi ecosystem.
Objective 3: reduce human-elephant conflict.	• **Malawi** - improving the protection of elephants and the enforcement of the wildlife laws in the Kasungu National Park and the Thuma Forest Reserve and the SOS Fence Extension for the Dedza-Salima escarpment. • **United Republic of Tanzania** - mitigation for human-elephant conflicts around Kilimanjaro National Park. • **Ghana** - elephant conservation through law enforcement and stakeholder engagement in the Mole National Park and its vicinity.
Objective 4: increase awareness on elephant conservation and the management of key stakeholders that include policymakers, local communities and other interest groups.	• **Ghana** - elephant conservation through law enforcement and stakeholder engagement in the Mole National Park and its vicinity. • **International Union for Conservation of Nature (IUCN)** - taking the African elephant database to the next level.
Objective 5: improve knowledge on the management of African elephants in the range States.	• **Nigeria** - using satellite collars to provide more effective protection of elephants and reduce human-elephant conflict at the Yankari Game Reserve. • **Gabon** - developing a quadcopter and infrared camera system to monitor and track the African forest elephant. • **Gabon** - traceability genetics in ivory to strengthen law enforcement in Gabon.

Objective 6: improve cooperation and understanding among range States.	• **LATF** - better cooperation in combating elephant poaching and illegal ivory trade in East Africa. • **LATF** - better enforcement of the law to combat elephant poaching and ivory trafficking in Central Africa. • **CMS/African Elephant Fund Secretariat** - adoption of the African Elephant Action Plan.
Objective 7: improve cooperation and collaboration on African elephant conservation among local communities.	• **Burkina Faso** - capacity-building for conflict management in Burkina Faso. • **Zambia** - assessment of human-elephant conflict and mitigation tools in Zambia.
Objective 8: implement the African Elephant Action Plan.	• Range States • African Elephant Fund

Elephants in Congo
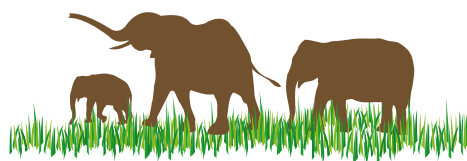Photo Credit: Roger Le Guen, Flickr

1

Reducing the illegal killing of elephants and the trade in illegal elephant products

The illegal killing of African elephants for ivory is the most serious threat to their existence.

Symbolic moment as Kenya sets ablaze 105 tons of ivory to highlight elephants' plight. Nairobi National Park, April 2016.
Photo Credit: Charlie Hamilton James, National Geographic

Since the turn of the nineteenth century, elephant populations have been dwindling from the pre-1900 estimates of 10 million, as a direct consequence of the rise of the ivory markets in Europe. It was not until the late 1970s, however, when poaching levels drastically escalated, that more than 50 per cent of their population was wiped out in the ten years between 1979 and 1989. In that decade the estimated population declined drastically from 1,300,000 in 1979 to 600,000 in 1989 (Great Elephant Census, 2017).

Thanks to the protection afforded to elephants under the listing of African elephants in Appendix 1 of CITES in 1989, the scale of killing was somewhat reduced; poaching and illegal trade continue to pose a threat to the survival of elephant populations.

"Poaching levels continue to pose an immediate risk to the survival of African elephants with the overall poaching trends in 2016 showing Africa-wide elephant populations are still in decline, with serious threats to populations in Central and West Africa, and some improvements in parts of Eastern Africa."

(CITES, 2016)

To combat poaching and illegal ivory trade, various national, regional, and international strategies have been implemented that are based on key priorities to mitigate the problem. These include:

AEAP strategies for objective I:

Strategy 1: Strengthen the capacity of law enforcement authorities and agencies to combat poaching and illegal trade in ivory and other elephant products.

Strategy 2: Harmonize national policies and laws relevant to the conservation and management of African elephants within and across range States where possible.

Strategy 3: Strengthen the laws relevant to the conservation and management of the African elephants.

These prioritized strategies are exemplified in regional projects as they address the growing threat to the future of the elephant species.

AEAP in the regions:

Nigeria:

Working in collaboration with Nigeria's Federal Ministry of Environment, the Wildlife Conservation Authority undertook and completed projects designed to address this objective, entitled "Supporting SMART ranger patrols at Yankari Game Reserve to strengthen law enforcement and reduce elephant poaching" and "Strengthening law enforcement and reducing elephant poaching at Yankari Game Reserve". The projects provided rangers with basic field equipment and enhanced capacities to track and monitor elephants more reliably and effectively and to improve their defense against poachers.

These projects supported conservation efforts at the Yankari Game Reserve, which has the largest surviving elephant populations in Nigeria.

Outputs included:

1. Equipping and reinforcing ranger anti-patrol missions – 195 patrols organized for the year;
2. Upgrading of monitoring systems from CyberTracker to SMART software;

3. Provision of two GPS iridium satellite collars to enhance the tracking of elephant herds;
4. 30 rangers trained in the use of very high frequency (VHF) receivers to track elephants in the field.

Results included:

- Better protection and more effective monitoring of the estimated 348 elephants at Yankari Game Reserve and reduction in poaching activity with zero elephant carcasses reported between January and September 2016;
- 141 arrests made for trespassing and poaching, indicating a stronger enforcement of the law.

Ornamental antique ivory tusk from the 11th century at the Louvre Museum, France
Photo Credit: © Marie-Lan Nguyen Wikimedia Commons

Ethiopia:

In Ethiopia the projects "Combating illegal trade in elephant ivory in Ethiopia", "Improving field intelligence and investigation capacity for ivory and other wildlife crimes in Ethiopia" and "Law enforcement operations, workshops and capacity building in Southern Ethiopia" were designed to recruit and train staff at all levels in the detection of wildlife and wildlife products, investigative procedures and anti-poaching patrolling, and to raise awareness on elephant conservation among local communities. Primarily, the project targeted officers at the Customs Authority offices, Federal Police Crime Investigation Division, and judicial staff and prosecutors at the Ministry of Justice.

Outputs included:

1. Equipping ranger anti-patrol missions and parks and airport surveillances ten scouts with a GPS each, road blocking equipment, and five metal detectors;
2. Training 60 custom officers on identifying ivory;
3. Training 40 scout at key areas in two parks-Omo and Mago National Park;
4. Training 40 policemen and judiciary staff on wildlife trafficking and detection;
5. Training 15 scouts on crime scene investigation and risk management;
6. 6 consultative community meetings on awareness-raising-community liaisons and 50 people within the local communities.

Results included:

• Over 155 law enforcement officers trained in how to identify, collect and handle wildlife products at over 12 working sites; and at Bole International Airport training carried out to improve the confiscation of evidence gathered and the prosecutorial and judicial handling of wildlife crime;
• Appointment of wildlife experts and criminal investigators;
• Circulation of promotional videos on television and at international airports focusing on illegal wildlife trade;
• Review of wildlife laws and enforcement of minimum sentences for convicted poachers of between a minimum of six months and a maximum of 18 years.
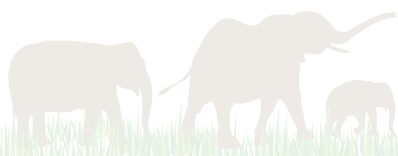
Recommendations

By improving the capacities for law enforcement, wildlife authorities and decision-makers in the range States, it will be possible to safeguard the future of Africa's elephants and build better institutions for the conservation of elephants.

Initiatives identified and carried out by range States to reduce the illegal killing of elephants and illegal trade have enhanced their capacities to fight against the criminal networks trading in ivory and elephant products and to deter poaching activities across their ranges. Primarily, these initiatives have included strategies targeted at various levels of enforcement and in regulation of wildlife laws and security. For the development of similar initiatives, projects should have either single-focus or integrated strategies, which include:

- **Increasing protection levels within parks for rangers and enforcement officers** – ensuring that appropriately equipped and trained officers undertake more anti-poaching patrols ranging further and covering much larger areas will mean that efforts to combat poaching are more effective;
- **Enhancing tracking of elephant movements (collaring and VHF tracking)** – patrol units can accurately track elephants to provide accurate information that can serve as an early-warning system against crop raiding or human-elephant conflict;
- **Upgrading or improving on monitoring systems** – by harnessing reporting synergies with the use of such critical tools as Spatial Monitoring and Reporting Tool (SMART) software, the Wildlife Enforcement Monitoring system and database, and the CyberTracker monitoring programme, it will be possible to determining distributions and thereby improve the protection and understanding of the behaviour and trends of the African elephant;
- **Increasing and improving shared responsibilities with wildlife authorities and community** – shared responsibilities ensure positive commitments to finding acceptable long-term solutions to human-elephant conflict and the conservation of the African elephant;
- **Informing the judiciary and policymakers on the need to review wildlife laws and policies to improve responses to wildlife crime and strengthen regulation of existing penalties** – strategies should include activities to raise awareness and increase incentives for seeking changes to the current legislative framework and to address elephant management concerns at local and national levels;
- **Strengthening collaboration among institutions at all levels for the enforcement and regulation of wildlife issues** – strategies developed should focus on reaching consensus on improving mechanisms to combat transnational wildlife crime, in order to set in place policies and resolutions for joint enforcement, to impose stringent penalties and to improve cooperation efforts with neighbouring countries aimed at protecting borders to deter criminal activity;
- **Ensuring specialized training for crime and investigation units, customs and federal police** – increasing the detection of ivory trafficking, improving the handling of confiscated ivory and the related investigation procedures, and enhancing intelligence work and data gathering. Such improvements will result in better implementation of wildlife laws, increased arrests and successful prosecutions.

Collaborative efforts at various levels are imperative to reduce the illegal killing of elephants and the illegal trade in ivory. All links with the local communities, enforcement officers, federal police, customs officers, border patrollers, policymakers, prosecutors and other agents are crucial in the fight against poaching and trafficking.

2

Maintaining elephant habitats and restoring their connecting corridors

Rapid population growth, which has brought with it urbanization and an expansion in infrastructure and agriculture, has led to an increase in logging and mining. This means that elephant habitats are not only becoming increasingly degraded or fragmented, but in some cases have been lost entirely.
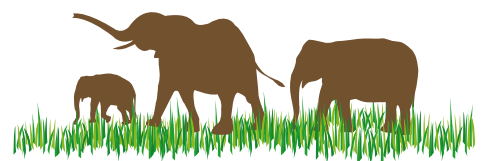
A family of elephants in their natural habitat at the Maasai Mara National Park in Kenya.
Photo Credit: Anjana Varma /UNEP

Because of the insufficient attention given to wildlife and wildlife habitats, plans for the use of local and national land have been made with increasing disregard for shared resources. Consequently, the existence of elephant habitats across the continent are now threatened by land pressures.

These threats restrict elephant movement within their traditional ranges and hinder their access to food and water resources.

Ensuring that range States can maintain these habitats requires elephant-friendly policies and the due consideration of national obligations to human populations and the need to protect our biodiversity.

In order to achieve this objective, range States must pursue the following strategies:

AEAP strategies for objective II:

Strategy 1: Ensure connections, where possible, between elephant ranges within and among range States.

Strategy 2: Establish and strengthen bilateral and multilateral support for the management of sites and corridors across borders.

Strategy 3: Promote the planning of internal and cross border land use within and among elephant range States.

Strategy 4: Ensure that the current elephant habitats within and between elephant range States are adequately maintained.

The rising threats to elephants posed by land conversion and expanding cities will only continue to worsen if not addressed. This may lead to the following situations:

*   Elephants continue to be forced into smaller habitats as human settlements surround their protected areas and cut off their migratory routes;
*   The expansion of road networks and railway tracks near forest areas and elephant paths will lead to increased fragmentation resulting in more incidents of human-elephant conflict, and consequently expose the species to increased poaching;
*   Expanding communities encroach on elephant habitats: human activities along elephant paths increase, and the expansion of agricultural activities exacerbates the current fragmentation and loss of habitats.

It is evident that national and collaborative action is needed to improve land planning and use that takes into consideration the possible deterioration of biodiversity and the inadequate consideration of the importance of African elephants to our shared ecosystem.

AEAP in the regions:

Namibia:

In Southern Africa, the project "Aerial survey of elephants in the north-west of Namibia" aims to improve knowledge on elephant management in range States. By conducting aerial surveys of the north-west regions of Namibia, it has provided a greater understanding of the density and distribution of its elephant populations. This information can thus be incorporated into national planning for the maintenance of elephant populations and their habitats.

Outputs included:

1. Collecting baseline information on the density and distribution of elephant populations in the north-western region of Namibia;
2. Updating estimates of the numbers of elephants;
3. Collecting data on elephant carcasses for submission to the MIKE programme.

Results included:

- "Aerial survey of elephants and other animals in north-west Namibia 2016"- census of elephants and other animals in NW Namibia;
- The first large-scale survey in almost 20 years;
- Improved conservation planning for the development of elephant management strategies;
- Launch of the elephant management strategy for 2017-2018.

> Understanding the dynamics of the elephants inhabiting the arid north-western region of Namibia has always been a challenge for the Ministry of Environment and Tourism and the stakeholders involved in the conservation of elephants. The funding from the UNEP African Elephant Fund enabled the Ministry to obtain baseline information on the density and distribution of elephants in the area, and how elephant distribution relates to the distribution of other wild animals and livestock. This project was undertaken during the worst drought in the area since the early 1980s. The last such large-scale elephant survey was conducted in 1998, nearly 20 years ago, and it was interesting to observe the changes in wildlife numbers in the twenty-year period. This was all made possible by the funding from the UNEP African Elephant Fund.

Kenneth Uiseb, Deputy Director, Wildlife Monitoring and Research, Directorate of Scientific Services, Ministry of Environment and Tourism

Kenya:

In Kenya, the project entitled "The impact of poaching on elephants and threats to elephants in Tsavo-Mkomazi Ecosystem" offers supporting evidence that elephant populations within and outside protected areas are increasingly threatened by poaching as herds move across the ranges. The census report developed has been instrumental in facilitating the sound management of elephants in the ecosystem and implementation of the overall national conservation strategy.

Outputs included:

1. Collecting information on the density and distribution of elephant populations in the Tsavo-Mkomazi ecosystem of Kenya inside and outside protected areas;
2. Developing strategies to address poaching and threats to elephants in the region;
3. Promoting appropriate land use planning;
4. Census report to serve as a guide for policymakers.

Results included:

- The "Tsavo-Mkomazi Total Aerial Census Report 2014" - the dry season count of elephants and human activity in the Tsavo-Mkomazi ecosystem.
- A relation analysis on elephants, and on the use of biophysical parameters and human high-use zones.

Recommendations

Initiatives working to address objective II of the AEAP demonstrate that the key threats to the management of elephant habitats are demographic pressures and institutional weaknesses related to the application of regulations on land use.

To maintain elephant habitats and to restore the connections between them, collective approaches to the management of constraints are essential. Strategies to strengthen institutions at different levels are crucial for the long-term success in protecting and conserving Africa's remaining elephant populations.

For the development of similar initiatives, projects should have either single-focus or combined strategies, which include:

- **Enhancing cooperation with various sectors at a national level** – the formulation of strategies that take into consideration overarching concerns for the overall development of all sectors can incorporate the development of binding and stringent measures to curtail poaching and illegal trade nationally;
- **Improving ecotourism** – such strategies are important in recognizing that securing of elephant populations and their habitats could serve as a stimulus for enhanced international and local support;
- **Recognizing the value added for national development from natural capital** – strategies should work on making policymakers aware of the importance of conservation, demonstrating that the threats to elephant populations reduce the benefits derived by species such as elephants in naturally preserving and protecting our ecosystem for further development;
- **Developing joint programmes with neighboring range States** – such strategies ensure the adequate maintenance of habitats by strengthening efforts and pooling resources to manage national and transboundary populations and existing protected areas and areas over which elephants are dispersed;
- **Establishing new sources such as dams and water pans and the preservation of existing elephant food and water sources within range States** – such strategies tackle the threats to shared resources due to increased human and livestock encroachment or human settlements in protected areas;
- **Building institutional capacity** – institutional weakness limits the potential to scale up the conservation and management of African elephants owing to the lack of human, technical and financial capacity, limited political will and poor governance. These deficiencies place significant constraints on national services such as enforcement, customs and the legal system, which are essential for conserving elephants;
- **Increasing the financial and technical support from international donors, partners and non-governmental and intergovernmental organizations in the implementation of activities to address the AEAP** – such strategies are necessary for furthering the momentum in building long-term, continent-wide solutions for conservation;
- **Strengthening existing or developing new partnerships between the private sector in industries such as logging, mining and oil** – such strategies can further encourage the protection of elephants by providing expertise and operational support in devising concession-based activities that can work toward conservation and increase national incentives in developing elephant-friendly policies;
- **Bolstering support from the international community** – strategies should target the international community for cooperation and collaboration since they be influential in exerting pressure on national governments to significantly enact stronger regulations for protecting biodiversity.

Attainment of this objective requires optimum levels of appropriate land-use planning and the strengthening of cooperation among key players.
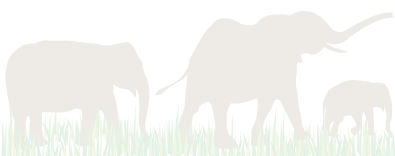
Phinda Private Game Reserve, Hluhluwe, South Africa
Photo Credit: Jason Briscoe | Unsplash
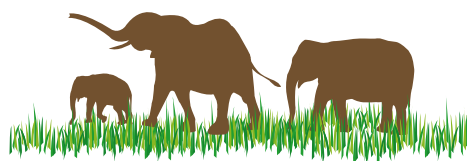
3

Reducing human–elephant conflicts

Continent-wide competition for available resources, such as land, which are already limited and becoming increasingly scarce for humans and elephants, contributes to human–elephant conflict.

Electric fencing in Livingstone, Victoria Falls, Zambia
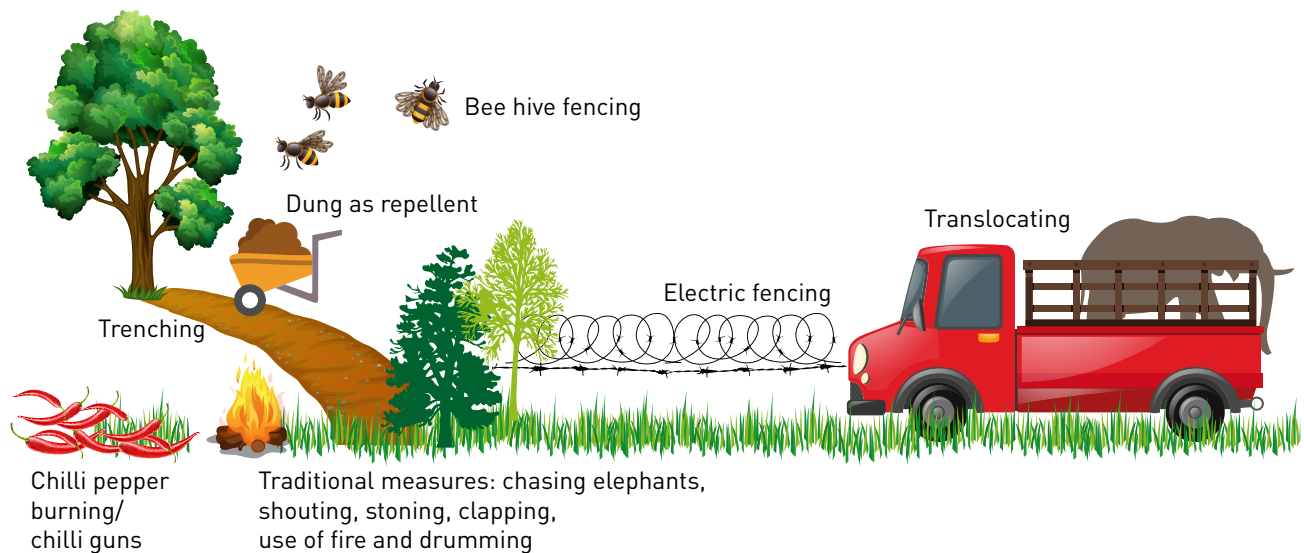Photo Credit: John Y Can | Unsplash

Human-elephant conflict is that which occurs as a result of human and elephant interaction, primarily during crop raiding, causing injury or death to humans, and the possible killing of elephants by humans.

Human-elephant conflict incidents are on the increase as a consequence of habitat loss and encroachment on to wildlife habitats brought on by land pressures from expanding populations, land conversion for agriculture and the development of facilities and infrastructure for Africa's booming cities.

Common approaches for reducing human-elephant conflict identified by African range States include:

> Over 80 per cent of African elephant's range lies outside formally protected areas, and inadequate management of human-elephant conflict is frequently a precursor to further decline in the numbers and distribution of elephants.

(Hoare, 1999)

Bee hive fencing

Dung as repellent

Translocating

Electric fencing

Trenching

Chilli pepper burning/ chilli guns

Traditional measures: chasing elephants, shouting, stoning, clapping, use of fire and drumming

In the above: The three frequently implemented approaches to reducing human-elephant conflict are: traditional measures, electric fencing and the so-called "chilli pepper" method

Moreover, populations living in close proximity to elephants are increasingly growing angered by or apathetic toward elephant conservation as a result of increased human-elephant conflict.

Human interactions with elephants resulting from increased crop raiding, property destruction or personal harm are negatively affecting elephant management, and failure in addressing these problems hinders harmonious coexistence with elephants.

The human-elephant conflict mitigation strategies identified to meet this objective have been devised to remedy the problem primarily among local affected communities.

AEAP strategies for objective III:

Strategy 1: Apply adaptive management approaches in addressing human-elephant conflict mitigation, focusing on capacity-building for managers and local communities.

Strategy 2: Establish participatory processes for the mitigation of human-elephant conflict.
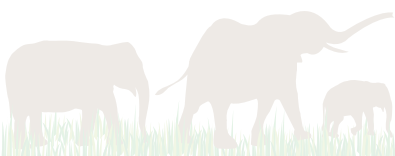
AEAP in the regions

Malawi:

In Malawi the projects entitled "Improving protection of elephants and enforcement of the wildlife laws in Kasungu National Park" and "The Thuma Forest Reserve and the Dedza-Salima escarpment SOS fence extension" have been carried out to tackle a multitude of issues affecting Malawi's elephant populations and enforcement capacities. Issues addressed included human-elephant conflict, poaching, limited capacity and ivory trafficking, among the priority areas.

Outputs include:

1. Adequate equipping of staff to carry out law enforcement;
2. Two awareness meetings to enhance capacities of the judiciary, customs officers and enforcement personnel at Kasungu National Park and Lilongwe and Chileka International Airport;
3. Erection of 12 km of solar-powered electric fence (of the total length of 30 km) along the northern boundary of the Thuma Forest reserve.

Results included:

- Erection of a fence for reduced human-elephant conflict and protection of elephants in the Thuma Forest Reserve;
- Zero crop raids and zero elephants leaving the reserve for the year 2016 and reduced human-elephant conflict ensuring better protection of elephants and populations residing close to the Kasungu National Park.

United Republic of Tanzania:

In the United Republic of Tanzania, the project, "Human-elephant conflicts mitigation around Kilimanjaro National Park in the United Republic of Tanzania" was carried out to address the growing concerns around human-elephant conflict in the country.

Outputs included:

1. Installation of a 2 km bee fence consisting of 200 top-bar hives bordering the villages of Challa and Ngoyoni;
2. Training of 30 farmers in Ngoyoni, Ngareni and Challa villages in the bee-fence mitigation method to counter human-elephant conflict.

Results included:

- Fencing for bees with 163 active colonies at the border of Challa forest around a 2 km perimeter;
- Improved welfare of communities through increased household income resulting from honey and better food safety.

Ghana:

Similarly, in Ghana the project on "Elephant conservation through law enforcement and stakeholder engagement in Mole National Park and its corridors" was designed to respond to incidents of human-elephant conflict and crop raiding in its 33 fringe communities.

Using community-Based Conflict Mitigation approaches, Mole Park personnel trained farmers to arm their farms against elephant attacks. The underlying cause of human-elephant conflict in Ghana has been identified as habitat loss due to land conversion, hence the training also involved awareness-raising on the conservation of elephants and management of land spaces.

Outputs include:

1. Training of 40 farmers fringing Mole National Park in the chilli pepper and canister-blasting methods to mitigate human-elephant conflict;
2. Identification of multiple modern methods of protection against human-elephant conflict and management of such conflict;

Results include:

• Better human-elephant conflict management among an estimated 40,000 people in 33 communities;
• Increased protection of the estimated 401 elephants at Mole National Park against retaliatory killings by farmers.

"Through the collaboration between Mole National Park and the African Elephant Fund, myself and 40 other farmers, farming close to the park and having our farms destroyed by elephants every year, benefited from certain elephant crop raid mitigation methods. The park also provided us with the resources required to protect our farms which we are applying.

For the first time in several years, our farms did not suffer any raids this year, as the mitigation methods we have learnt and are now applying appear to be working to perfection. With this, we expect to make a good harvest from our farms this year, thanks to the support from the African Elephant Fund.

Yakubu Ibrahim, Farmer, Larabanga-Mognori, Ghana

From Left: Alhassan Bondu, Yussif Iddrisu and Yakubu Ibrahim, farmers applying human-elephant conflict techniques (chilli fencing) acquired during the training session to protect their farm harvest (buried yams) against elephant raids.
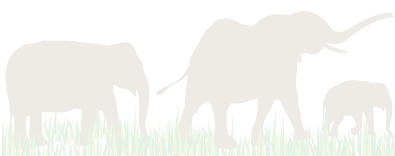
Recommendations

There should be appropriate methods for reducing human-elephant conflict that take into consideration available resources in personnel, finances or equipment and local capacities.

Across the range States, a combined number of methods on mitigating human-elephant conflicts have been attempted with mixed results. Those methods deemed ineffective have been replaced with others more convenient and effective that have been means-based on community's needs and the feasibility of their success.

For the development of similar initiatives in managing human-elephant conflict, projects should have either singularly focused or combinational strategies that take into consideration the advantages and disadvantages of each method in preventing or mitigating human-elephant conflict.

Table 1 below, identifies a variety of approaches used by range States in protecting livelihoods, reducing the potential problems inflicted upon community members and to elephant populations, and in redressing issues related to human-elephant conflict.

Table 1: **Pros and cons of identified mitigation and preventive methods in reducing human-elephant conflict as identified by range States and addressed in joint conservation strategies shared by range States in collaboration with organizations such as IUCN and the Wildlife Conservation Society (WCS).**

Method	Advantages	Disadvantages
Traditional measures: Chasing elephants, shouting, stoning, clapping, use of fire and drumming.	Easy to implement, and cheap to construct. Limited need for technical materials.	• May result in more harm if not combined with other methods. • Only a temporary solution.
Translocation	Best alternative to killing of problem elephants.	• May introduce competition, resource selection and dispersal of elephants in release areas; • Residents' misconceptions toward elephants are reinforced to assume that elephants are the sole cause of their social, economic and environmental problems; • It is expensive, requires expertise, time and logistical planning; • Only a short-term solution for the specific location as it moves the problem to another area and remaining elephants may continue to cause human-elephant conflict; • Generates issues with the demographics of the elephant populations in capture areas; • May cause death of elephants while they are being moved.
Disturbance shooting (over the heads of elephants)	Temporary solution.	• Over time elephants become habituated. • Usually carried out by wildlife authorities and low response times can be experienced.

Method	Advantages	Disadvantages
Problem elephant control (killing of elephants causing human-elephant conflict and of crop-raiding elephants)	Quick fix to the problem and therefore a last resort.	• Illegal and has only been accepted as a last resort; • Should only be undertaken by wildlife authority
Camera traps	Useful in acquiring information.	• Not a deterrent; • Poor reaction times from authorities
Dung repellent	A temporary distraction.	• Determined elephants would push through to crops.
Musth secretions – thick secretions from the temporal glands (common during bull elephant cycle during mating)	Believed to be highly effective as a repellent for non-musth bulls and females.	• Hard to acquire; • More research needs to be conducted on this method.
Phones	Useful in acquiring information and in alerting authorities on occurrences of human-elephant conflict.	• Not useful for timely reactions upon the reporting of incidents.
Chilli fences and buffer crops (tea, timber, tobacco, sisal)	Irritates the elephants and may agitate elephants enough to make them leave crops.	• Elephants may cut across to reach target crops; • Elephants become habituated.
Trenches and pit traps	Immediately prevent elephants from crossing paths. A short-term solution. May create a temporary psychological barrier.	• Difficult to construct and hard to maintain as they become vulnerable to soil erosion; • In addition, elephants become habituated.
Smart granaries (brick and cement or concrete)	Effective if they appropriately and completely surround crops preventing access by elephants.	• Difficult to construct; • Labour-intensive.
Stone walls	Very effective, especially if coupled with an electric fence.	• Can be expensive.
Bee hive fencing	Very effective, especially under appropriate application such as complete enclosure of crop fields and settlements. May also serve as extra income and food source.	• Difficult to construct; • If not properly handled may cause harm to persons handling hives.

Method	Advantages	Disadvantages
String fencing that uses solar–powered LED lighting.	Low cost, energy-efficient, long-lasting, mitigates human-elephant conflict and beneficial for prevention of other conflicts such as between livestock and lions.	• Often held back by management.
Electric fencing	Simple and could be a permanent solution if well managed, and effective if it is a circular fence.	• Maintenance and power supply must be constant; • Low voltage may not work to deter elephants and merely irritate a determined one; • If power supply is cut to a section then a longer section may become inactive and therefore become permeable to elephants.
Information management	Reliable information is critical for management of human-elephant conflict situations and for the development of tools to strengthen policies.	• Requires expertise in the collection of relevant data. • Regular monitoring can be difficult to achieve with no expertise.
Land-use planning and communal farming blocks	Such actions encourage protection of corridors by engaging co-planning with multiple stakeholders having clearly defined roles and responsibilities. Also offer a good means of leveraging protection efforts against elephants.	• Difficult to implement if not devised in the conception stages of planning; • Requires concerted efforts from multiple players; • Can be labour-intensive.
Offsetting costs of conflicts	Benefits provided increase people's tolerance to problem elephants.	• Not a deterrent.
Compensation schemes	Farmers received compensation for damage in cash or in-kind payment	• Process of measuring damage is too exhaustive; • Easily corruptible.
Community insurance schemes	Best alternative to compensation schemes. Tightly controlled and difficult to corrupt.	• Payment is only made available to registered conservancy members.
Benefits from wildlife-based ecotourism	Benefits take the form of building of schools, clinics, capacity-building, training, etc.	• Not a deterrent.

As range States develop strategies and methods for preventing and mitigating human-elephant conflict, the chief concern should be a harmonious co-existence between humans and elephants. The methods used must be revised or updated accordingly, and responsibilities must be shared with wildlife authorities and the communities to effectively safeguard against human-elephant conflict and to protect and conserve elephants.

4

Increasing awareness on elephant conservation and management of key stakeholders, with the inclusion of policymakers and local communities among other interest groups

Involvement of key stakeholders is crucial in conservation and management of African elephants.
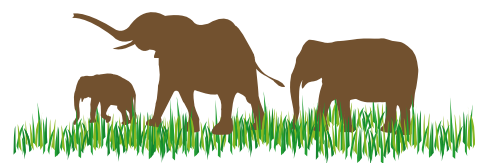
Although much scientific research and data are available on biodiversity in general and the elephant species in particular, most of this information is difficult to obtain and overly technical in nature for the majority of audiences. This creates difficulties relating to the interpretation of heavily scientific and technical data and limits access to this information by interest groups and individuals. These issues are compounded by the varying reliability of the information acquired.

In view of these growing concerns, which hamper efforts to inform decision makers and the public about the elephant species, easily communicable updated information accessible to all stakeholders is an imperative.

The strategies identified by range States to ensure increased awareness on elephant conservation and management include:

AEAP strategies for objective IV:

Strategy 1: Raising awareness among stakeholders on the conservation of the African elephant.

Strategy 2: Use of indigenous and traditional knowledge for the conservation of the African elephant.

Strategy 3: Promoting information sharing and research findings on the conservation and management of elephants.

Project activities to meet this objective have successfully been carried out in the regions, in partnerships with various partners and non-governmental and intergovernmental organizations.

AEAP in the regions

Ghana:

One excellent example under way in Ghana is the project: "Elephant conservation through law enforcement and stakeholder engagement in Mole National Park and its corridors". The project was designed to address not only objective 4, but also objectives 3 and 7; to increase awareness by key stakeholders of elephant conservation and management; to reduce human-elephant conflict; and to improve cooperation and collaboration on African elephant conservation among local communities.

Outputs include:

1. In-service training of 125 anti-poaching staff for improved anti-poaching missions, ensuring 80 per cent patrol cover, as compared to the previous cover of 55–60 per cent;
2. Training of 40 farmers in human-elephant conflict and techniques to mitigate crop raiding, with zero raids reported for 2016;
3. Bilateral relation meetings with neighbouring States and the sharing of research findings (meeting between the Ghana Wildlife Division and Kabore-Tambi National Park in Burkina Faso on the management of the transboundary elephant population);
4. Developing educational conservation programmes;
5. Producing an awareness-raising documentary, "The amazing world of elephants";
6. Producing and distributing educational material including 2,000 flyers and other items.
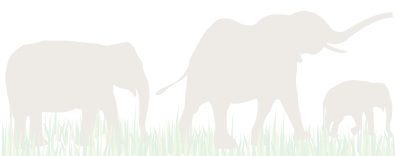
Results included:

- Documentary - "The Amazing World of Elephants" on elephant conservation;
- Improved protection for farmers against human-elephant conflict;
- Strengthened defences against poaching.

All regions:

Similarly, IUCN is carrying out a project to promote information-sharing for a wider audience on the conservation and management of elephants. The project is called "Taking the African Elephant Database (AED) to the next level". The project was designed to support IUCN work on the database to ensure better access to its research findings, from which valuable and reliable information can be retrieved on elephant populations in the 37 range States.

Outputs include:

1. Updating of reporting – 24 submissions entered, nine countries' information updated and 90,000 elephants surveyed;
2. Modification of the range maps and survey data.

Results included:

- African Elephant Status Report 2016 – consolidation and dissemination of reliable information on elephant populations and distribution, which can be accessed by all stakeholders: range States, scientists, policymakers and interested parties.

Such projects on the conservation and management of elephants empower communities and inform the public with the aim of protecting livelihoods, raising awareness among communities on the importance of elephants to the ecosystem, providing information on elephant population distributions and changing perceptions on elephant poaching and the trade in elephant products.

Region	Pop. Estimates 2006 (AESR 2007)	Pop. Estimates 2015 (AESR 2016)	Population difference from 2006 to 2015	Estimated % of regional population distribution in 2006	Estimated % of regional pop. distribution in 2015	Estimated % change of regional pop. from 2006 to 2015
Central Africa	14,622 ± 4,259	24,119 ± 2,865	(+)9,497	2.87	5.80	39.37
Eastern Africa	165,151 ± 27,990	86,373 ± 10,549	(-)78,778	32.50	20.80	-47.70
Southern Africa	320,690 ± 23,132	293,447 ± 16,683	(+)27,243	63.10	70.63	-8.50
West Africa	7,862 ± 375	11,489 ± 2,584	(+)3,627	1.54	2.76	46.13
Total	508,325± 36,563	415,428 *± 20,111	(-)92,897			-18.28

Population change between 2006 and 2015 in the regions
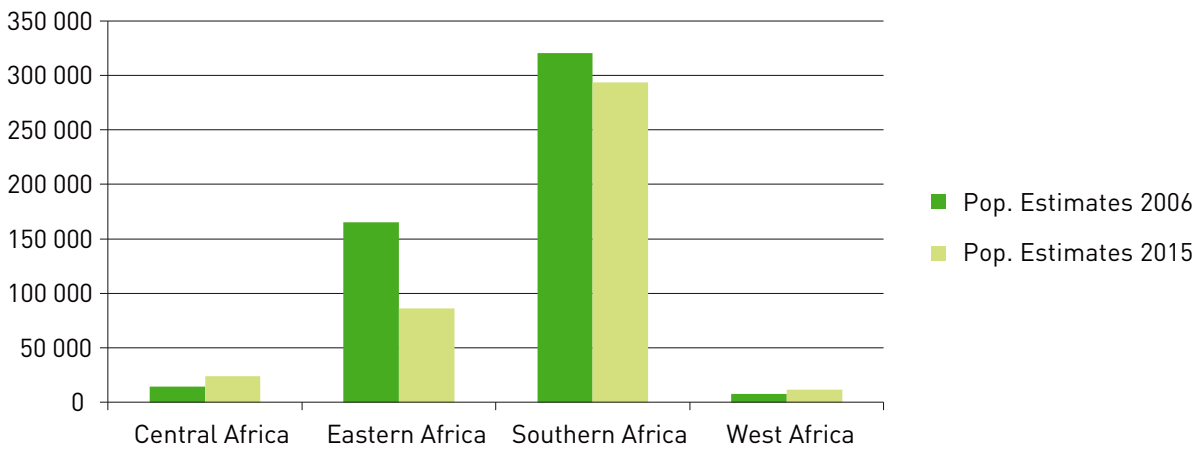
Source: Data retrieved from the African Elephant Status Report (Thouless, 2016)
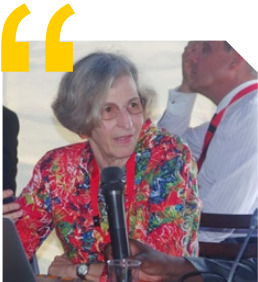
> The IUCN-SSC African Elephant Specialist Group has managed and maintained the African Elephant Database for over 24 years. The database is unique because it is the only tool that tracks the numbers and distribution of African elephant populations across their entire range. The African Elephant Fund contributed to the release of our latest update from the database – summarized in the 2016 African Elephant Status Report. The report revealed that Africa's elephant population has seen the worst declines in 25 years, of around 111,000 elephants since 2006, mainly due to poaching over the past ten years. The report not only provides information on the changes in elephant numbers but, because it is spatial, it also shows where these changes are occurring. As the official repository for African elephant survey data, the database is constantly under development to maintain it as a current and useful tool for monitoring and analysing the status of the African elephant and to improve the frequency with which updates can be released. The report was critical to informing decisions related to the African elephant at the latest Conference of the Parties to CITES in September 2016.

Holly Dublin, Chair, IUCN-SSC African Elephant Specialist Group
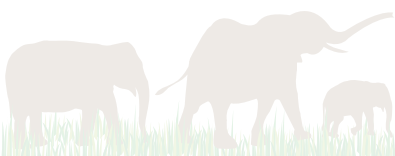
Recommendations

Long-term success in generating support from stakeholders and local communities requires improving the sharing of information about elephants and their habitats.

Support from the wider public for the conservation and protection of elephants is crucial for the survival of the African elephant. The dissemination of misleading information among the general public may lead to negative perceptions and attitudes within populations against the conservation of elephants. It is vital that these perceptions are changed and that accurate information is available to encourage political audiences, law-makers, wildlife authorities and local communities to support conservation efforts.

For the development of similar initiatives to raise awareness among the wider public, projects should have either single-focus or combined strategies which include:

- Developing awareness-raising campaigns – such strategies should focus on appealing to the general public, wildlife authorities, local communities, schools, and other working groups;
- Establishing workshops and programmes in rural areas to help in reducing human-elephant conflict – working with the local communities should be prioritized to help them understand how they can protect themselves against human-elephant conflict and share responsibilities in that regard;
- Attracting increased media coverage on elephant conservation – such strategies work by capturing the attention of wider communities either by engaging their collaboration or by sharing documented imagery and footage with the media to build enthusiasm for conservation efforts;
- Encouraging the widespread dissemination of information on elephants – ensuring the wide availability and visibility of educational resources and equipping policymakers with reliable information so that they can exert pressure on legislators and to emphasize the significance of developing legislation for the protection of elephants.

A communications strategy is key to achieving success with the general public and winning their support for the conservation and management of African elephants. The target audience should be from all sectors of society such as schools, local communities, policymakers, non-governmental organizations and the private sector. The campaigns should be informative and accurate to enable policymakers to increase protection of the elephants and should also highlight the ecological and economic importance of elephants.

5

Strengthening knowledge among range States on the management of elephants

The understanding of current elephant numbers, trends, distributions, and behavioral patterns is essential for the design of long-term strategies and approaches for the conservation and management of Africa's elephants.
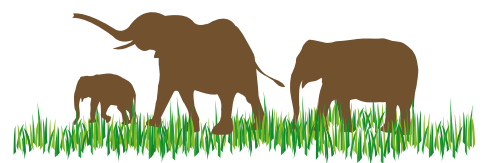
Kapama Private Game Reserve, South Africa
Photo Credit: Chris Rhoads | Unsplash

Having the best available information enables policy and decision-makers to carry out comprehensive, critical and beneficial strategies to ensure the protection, conservation and best management approaches for the elephant species.

The following strategies will enable better knowledge and management of elephant populations and their habitats:

AEAP strategies for objective V:

Strategy 5.1: Determine and monitor the status of African elephant populations and their habitat within and among elephant range States.

Strategy 5.2: Develop mechanisms for acquiring and distributing information within and among elephant range States.

With the aim of increasing knowledge on elephant management among range States, projects have been conducted that work towards improving the available methods to monitor, track and report the distribution of elephant populations and devising new technologies to that end.

AEAP in the regions

Nigeria:

To address this objective, the Wildlife Conservation Society (WCS), a non-profit organization working with the Nigerian Federal Ministry of Environment, carried out a the project on: "Using satellite collars to provide more effective elephant protection and reduce human-elephant conflict at Yankari Game Reserve". The project aims to improve monitoring of prioritized populations by fitting satellite collars on identified elephants and to implement different strategies for communities close to the park to reduce human-elephant conflict.

Similar collaring exercises that have been replicated throughout the region by various partners have been instrumental in helping range States understand the status of elephants and their impacts upon their habitats.

Outputs included:

1. Purchase of two GPS iridium satellite collars for fitting on two Yankari elephants –to ensure better monitoring of the elephants and to provide information on their behaviour patterns;
2. Training of 30 rangers in the use of VHF receivers – -Enhancing the tracking and monitoring of elephants on the reserve.

Results include:

• Reduction of crop damage around the 142 communities, with a total population of 76,000 mostly farmers living around the park.

Photo Credit: Natalie Ingle
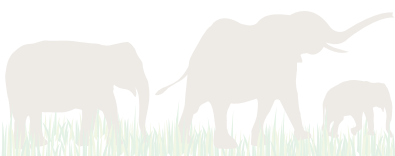
"Information from the collars helped us to know the location where the elephants stayed and focus our patrols to better protect them. It also helped us advise people in the game viewing office on areas in which the elephants were located so that tourists could find them. The collars also helped us to chase elephants when they go out of the reserve to raid farms. One of the collars also helped us to find the carcass of an elephant that was killed – probably by irate farmers due to crop raiding because it had a collar on."

Nacha Geoffrey, WCS manager
at the Yankari Game Reserve, Nigeria

CAPTION: Members of the Wildlife Conservation Society carrying out a monitoring activity by adding satellite collars to improve elephant protection and reduce human-elephant conflict at Yankari Game Reserve, Nigeria.
Photo Credit: © AEF

Gabon:

Also in pursuit of this objective, Duke University and the Humans and Autonomy Laboratory formed a partnership with the Nicholas School of the Environment and the Agence Nationale des Parcs Nationaux in Gabon to develop a project entitled "Developing a quadcopter and infrared camera system to monitor and track the African forest elephant". The project was designed to improve Gabon's current method of estimating populations by counting dung piles. The improved system acts as a best practice that other range States could incorporate or replicate for identifying and tracking trends, distributions and populations of their elephants.

Outputs include:

1. Devising studies on how to develop a low-cost quadcopter and infrared camera system for the monitoring and tracking of elephants, resulting in more precise elephant counts and using low-impact monitoring techniques for studying elephants.

Results included:

• Development of machine-learning algorithms to track the African forest elephant for improved tracking and for developing a low-cost, drone and camera monitoring system in Gabon.
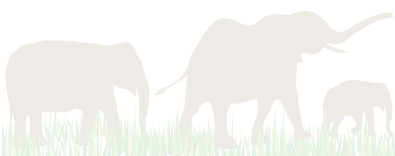
Gabon:

Another project is currently under way in Gabon to improve knowledge on the populations of elephants within range States. The project, "Traceability genetics in ivory for strengthening of application of the law in Gabon", aims to improve scientific analysis techniques in Gabon for analysing ivory and determining the origins of collected ivory.

Outputs include:

1. Development of a database to compare the ivory seizures and elephant carcasses discovered in Gabon;
2. Technical training for staff and laboratory technicians on ivory traceability techniques;
3. Collection of samples from elephant carcasses, extraction of DNA (tissues, bone, ivory), and the development of DNA extraction for the analysis of ivory samples and genotyping of populations in real time polymerase chain reaction.

Results include:

• Enabling Gabon to become self-sufficient in the traceability analysis of ivory.

These improvements on current methods and the development of new technologies make it easier to study the African elephants and offer vital information to decision-makers for agreements affecting the conservation and management of elephants.

" In an effort to help combat the alarming decline of African forest elephants, the Duke University Humans and Autonomy Laboratory formed a partnership with the Nicolas School of the Environment, the Agence Nationale des Parcs Nationaux in Gabon, and the African Elephant Fund to design and develop a low-cost, drone-based elephant monitoring and tracking system using a handheld, easy-to-use touchscreen display. The goal was to arm local conservationists with this new technology to be able to more directly monitor the behaviour of forest elephants, estimate population numbers, and assist in anti-poaching efforts. "

Professor Mary Cummings, Director, Duke Robotics

Recommendations

By improving our knowledge of elephants, we can help range States:

(a) To become empowered through a better understanding of the movements, trends, distribution and status of the elephants, thereby also improving the management of the species;

(b) To use that information to ensure a harmonious coexistence between humans and elephants. Achieving these goals will help in countering human-elephant conflict, protecting the interests of local communities, livelihoods and families and protecting elephant populations across their range.

For the development of similar initiatives, projects should have either single-focus or combined strategies which include:

- Investing in science and innovation-based techniques – these strategies should focus on devising techniques and methods for improving the monitoring, tracking and knowledge of elephants;
- Supporting studies to support ecotourism – these strategies are essential in encouraging elephant-based tourism and developing incentive schemes for generating economic benefits for local communities;
- Improving strategies for the prevention and mitigation of human-elephant conflict – studies in this area can be instrumental in working to change perspectives and attitudes of local communities toward conservation;
- Improving knowledge on the dynamics of conflict – information on the nature of the conflicts and the patterns of elephant raids should be understood for devising newer and more effective strategies to counter human-elephant conflict;
- Enhancing collaboration with industries and other major groups – such strategies encourage partnerships for conservation and can offer technical, human and financial solutions to address the problem of human-elephant conflict;
- Strengthening legal policies and laws to help mitigate human-elephant conflict – from local to national levels, policies must be devised to support in implementing and strengthening legally-binding actions to tackle human-elephant conflict.
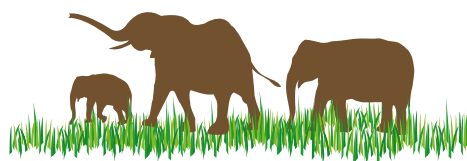
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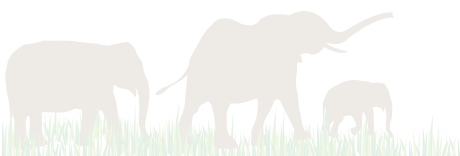
Strengthening cooperation and understanding among range States

There is a need for increased cooperation and synergy in the implementation of existing regional and transboundary elephant conservation policies and strategies, and national elephant action plans.

Tema Ghana
Photo Credit: Nathaniel Tetteh | Unsplash

To ensure that current regional and national strategies have a positive impact on sustainable policies and lead to regional integration, there needs to be increased sharing of information, development of joint initiatives and greater engagement at forums on biodiversity conservation and management.

Some key intergovernmental platforms that have led to greater cohesion on elephant conservation include:

• African Union Commission
• Economic Community of West African States (ECOWAS)
• East African Community (EAC)
• Convention on Biological Diversity (CBD)
• Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
• Convention on the Conservation of Migratory Species of Wild Animals (CMS)
• Central African Forests Commission (COMIFAC)
• Common Market for Eastern and Southern Africa (COMESA)
• Southern African Development Community (SADC)

The following strategies have been identified to encourage cooperation and understanding amongst range States:

AEAP strategies for objective VI:

Strategy 6.1: Foster exchanges across sectors, borders, regions and continents to integrate the needs of elephant conservation and management into national priorities and agendas.

Strategy 6.2: Use existing political, economic and other frameworks to promote cooperation on elephant conservation and management, such as the African Union Commission, ECOWAS, SADC, EAC, COMIFAC and COMESA.

AEAP in the regions

Kenya, the United Republic of Tanzania, Uganda, Burundi, Rwanda and Ethiopia

An exemplary joint project addressing objective VI of the AEAP is the project on "Enhancing cooperation in combating elephant poaching and illegal ivory trade in East Africa", agreed upon at the Wildlife Directors Meeting organized by the Lusaka Agreement Task Force. The project was designed to bring together chief executive officers, heads of wildlife authorities, directors of wildlife and policymakers from relevant ministries in five East African countries (Burundi, Ethiopia, Kenya, Rwanda, Uganda and the United Republic of Tanzania). The initiative was implemented to remedy the dire situation in the region with soaring levels of poaching and illegal trade. The objective of the meeting was to reach agreement on collaborative efforts to formulate and put into practice strategies to tackle threats to the conservation and management of elephant populations in the region.

Cameroon, Central African Republic and the Congo

Another initiative of the Lusaka Agreement Task Force, on "Strengthening law enforcement capacity to combat elephant poaching and ivory trafficking in Central Africa", was designed to reinforce regional collaboration in the Central African region by addressing threats to cross-border elephant populations. Working to improve skills, knowledge and awareness on wildlife law enforcement, the project targeted personnel at the Sangha Trinational Site and conducted training courses in these areas. The Sangha Trinational Site is a transboundary conservation ecosystem in the north-western Congo basin, a convergence point for Cameroon, the Central African Republic and the Congo.

Joint initiatives of this nature can help in meeting a number of AEAP priority objectives; thus, in these two projects, the following objectives were pursued:

1. Reducing the illegal killing of elephants and illegal trade in elephant products;

2. Maintaining elephant habitats and restoring the connections between them.

In undertaking this work, the wildlife institutions from the East African- Lusaka Agreement Task Force project were able to come up with a resolution setting forth their commitments and actions to foster inter-State cooperation. Their policy solutions, coupled with appropriate operational approaches, have been instrumental in tackling transboundary wildlife crime. The training sessions conducted as part of the Central African project also bolstered regional cooperation and understanding on enforcement relating to poaching and the trafficking of ivory.

Outputs included:

1. Formulating and agreeing on common strategies to effectively combat elephant poaching and illegal trade in ivory: resolution of the Eastern Africa Wildlife Directors Meeting;
2. Sharing experiences in implementing national plans for improving knowledge on conservation and the management of elephants;
3. Three bilateral wildlife management arrangements (Kenya-UR Tanzania, Kenya-Uganda, Uganda-South Sudan) on cross-border wildlife management to combat poaching and illegal trade;
4. Training of enforcement personnel in combating cross-border poaching and trafficking at the Sangha Trinational Site in Cameroon and the Congo.

Results include:

• Resolution of the Eastern Africa Wildlife Directors Meeting – common strategy for combating elephant poaching and illegal trade;
• Development of a train the trainers course at the Sangha Trinational Site;
• Development of a forum that can be replicated in other subregions and which may possibly culminate in a regional forum for wildlife authorities.

All regions:

The Secretariats for the African Elephant Fund and the Convention on Migratory Species collaborated on a joint resolution to be adopted by the Conference of the Parties to the Convention at its twelfth meeting, in October 2017. The resolution, on the adoption of the African Elephant Action Plan, calls for the adoption of the AEAP by the CMS parties in support of CMS resolution 11.13 on concerted and cooperative actions, and resolution 11.10 on synergies and partnerships. The resolution and adoption of the AEAP will strengthen collaboration between the CMS parties and the African elephant range States on the implementation of the AEAP and promote their participation in initiatives which serve to protect cross-border elephant populations, their habitats and corridors.

Outputs include:

1. Development of stakeholder engagement on the AEAP;
2. Development of a joint agreement on using a single plan for the conservation and management of elephants;
3. Merging of technical expertise and resources for a single solution plan by CMS Parties and the African elephant range States.

Results include:

• CMS resolution for adoption of the AEAP.

Recommendations

Rising threats to Africa's elephants are clear indicators that more should be done in protecting transboundary populations and in ensuring that institutions, regions and range States work together in addressing the challenges that threaten the survival of the elephant species in Africa.

For the development of similar initiatives to engage stakeholders and to bolster regional integration of efforts and resources, projects should have either singularly focused or combinational strategies which include:

"It is worthy having the African Elephant Fund supporting the noble fight against ivory smuggling through the work of the Lusaka Agreement Task Force to improve our enforcement capacities and efforts in attaining our common goal of reducing and ultimately eliminate poaching and related organized illegal trade across the continent and beyond."

Bonaventure Ebayi, Director,
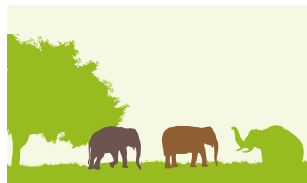Lusaka Agreement Task Force.

Eastern Africa Wildlife Directors coming together to formulate a common strategy to combat elephant poaching and illegal trade in ivory.

- Promoting transparent governance mechanisms and accountability – such strategies can promote partnerships if the actors and institutions involved can ensure sustainable policies that are in line with regulation and free of shortcomings;
- Establishing cooperation between stakeholders and groups addressing national security in relation to wildlife crime and drug trafficking – such strategies are important because of the complexities involved in tackling these problems that require intervention from various levels at both continental and international levels;
- Addressing factors related to biodiversity that are compounded by political instability within countries and their neighbours – such strategies work to address possible increases in poaching and to carry out enhanced enforcement activities that incorporate support across numerous countries;
- Reducing proliferation of small arms and weaponry – such strategies are articulated around national policy on arms and their regulation that determine accessibility to weapons which may be used for poaching (such intervention is imperative in countries identified as having increased poaching);

- Strengthening law enforcement capacities – such strategies may address numerous issues in order to improve the protection level of elephants within and among range States, such as:
  - Providing necessary equipment and deploying human, financial and technical resources to carry out anti-poaching operations, and to improve system processes and the management of knowledge;
  - Improving collaboration among range States in terms of sharing information on operational networks for improved anti-poaching patrols on the ground or by air, within and across borders;
  - Strengthening enforcement on regulations and screening of transit cargos by customs authorities, which could lead to the apprehension of perpetrators at borders in transit and consumer countries of wildlife products.
- Bolstering incentives for the public (authority personnel, local communities, and general public) and reinforcing efforts toward conservation – these strategies aim to tackle the decline in support for conservation caused by a number of factors such as human-elephant conflict and limited resources for personal protection and for enforcement. These factors have led to increased negative attitudes among communities to the need for conservation of biodiversity and, ultimately, to the downscaling of efforts to counter wildlife crime and to prosecute criminals;
- Tightening security at international borders – such strategies target the shortcomings present at various levels the customs authorities which present opportunities for organized criminal activity to move in and continue with the trafficking of ivory and wildlife products.

Cooperation among range States is imperative in order to understand and address the increased challenges relating to the enforcement of wildlife protection in a landscape complicated by: improved weaponry; technological advancements; growing apathy; and national and international deficiencies. Range States should develop the above strategies within their territories and across their borders to protect and conserve the African elephant and its habitat.

> "The three countries of the Congo, Cameroon and the Central African Republic value the Sangha-shared ecosystem and therefore value an intervention of this kind that will go a long way towards safeguarding our treasured resources, a global heritage. We hope that the African Elephant Fund will continue to provide us with the needed support to overcome wildlife enforcement challenges in the central African region and in particular the Sangha Trinational Site."
>
> Dieudonné Sita, Representative of the Minister for Environment, Sustainable Development and Forest Economy of the Congo.

7

Improving cooperation and collaboration on African elephant conservation among local communities

Recognizing that the livelihoods of communities living in close proximity to elephants are equally threatened because of the increase in shared spaces and the competition for limited resources, improved cooperation is vital for elephant conservation.
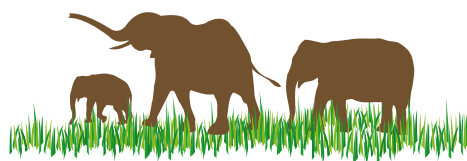
Photo Credit: Chrissie Kremer | Unsplash

The fringe communities which share land and resources with elephants are directly affected by elephant conflict through damage to property and are vulnerable to injury or death. Moreover, these communities often suffer loss of revenue caused by crop raiding and, in many cases, tourism, which generates profits to which they are entitled but instead is largely directed to those outside the communities.

As a result, attitudes towards conservation are negatively affected, and disharmony created in those communities living with elephants. This leads to retaliatory killings of elephants and continued encroachment on their habitats.

Such disparities must be acknowledged and addressed in the communities affected, to foster co-existence with elephants and tolerance for them and to have them work in harmony with efforts to conserve and protect the elephant populations.

To mitigate the problems faced by communities living in close proximity with elephants, the single most imperative strategy – unanimously agreed on by all African range States – has been to:

AEAP strategies for objective VI:

Strategy 7: Devise or improve and implement sustainable incentive schemes to benefit local communities.

Outstanding examples may be seen in countries far apart in the Western and Southern Africa regions that have carried out projects in pursuit of this objective.

AEAP in the regions

Burkina Faso:

In the Western Africa region, the project in Burkina Faso on "Capacity-building for the management of human-elephant conflicts in Burkina Faso" was designed to promote the harmonious coexistence of communities with elephants. By devising a national strategy in consultation with local and regional stakeholders, the project sought to develop tools for the prevention and management of human-elephant conflicts for adoption by the community. Such tools have been beneficial in reducing the adverse effects of incidents resulting from human-elephant conflict and in strengthening conservation of the elephant population.

Outputs include:

1. Assessment and adoption of a national strategy on the best ways of tackling human-elephant conflicts;
2. Training the community in adaptive measures to address human-elephant conflicts.

Results include:

•   A national strategy on managing human-elephant conflict, improving the livelihoods of communities, safeguarding farms and protecting elephants.
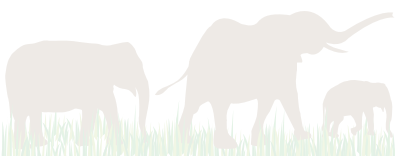
Zambia:

In Southern Africa, the project on "Human-elephant conflict vulnerability assessment and mitigation tools in Zambia" was designed to provide response strategies for reducing and dealing with human-elephant conflict in Zambia. As demonstrated in the project assessments, the growing populations, proliferation of agricultural activities and expansion of settlements have inevitably exacerbated conflicts between elephants and humans.

Outputs include:

1. Conduct of a human-elephant conflict vulnerability assessment and data collection in Lupande and Chiawa villages;
2. Organization of a stakeholders' workshop with experts to develop the human-elephant conflict vulnerability assessment and response strategy report.

Results included:

• A response strategy to be adopted by communities in order to reduce and mitigate human-elephant conflict incidents.

Human-Elephant conflict assessment taking place at the Lupande and Chiawa villages in Zambia.
Photo Credit: © AEF

Recommendations

Solutions for improved collaboration and cooperation on the conservation of elephants among local communities should primarily target peasant farmers, as they are among the residents most affected by disruptions to their livelihoods and socioeconomic status in the areas highly affected by incidents of human-elephant conflict.

Some methods for preventing and mitigating human-elephant conflict are difficult to implement or too expensive to develop and consequently local communities fall victim to more harm and loss of income due to crop raiding or property damage. As a result of these frustrations, farmers resort to the retaliatory killing of elephants and in many cases expand their agricultural or land activities to gain more space to replace or supplement their lost fields and crops. Often they move inwards toward previously protected areas where they construct fields or homes and further degrade habitats for biodiversity in general and elephants in particular.

To remedy this problem, creating more partnerships between wildlife authorities, local communities and the public sector is essential to enable wildlife management to raise awareness among communities of their actions that affect elephants, on how communities can coexist with elephants and on how to protect communities against human-elephant conflict.

The following table shows a list of problem areas identified by communities living with elephants and the recommended responses that have been developed by range States, which can be used for developing initiatives focused on improving collaboration and cooperation on the conservation of elephants among local communities.

This motorbike was procured with funding from the African Elephant Fund and allocated to me to facilitate my law enforcement duties. Until this bike arrived, we used to either walk or use our rickety bicycles over long distances to control crop-raiding elephants, especially around the park and affected communities in the Red Volta Valley, which was very tiring and ineffective.

Now, with these motorbikes, we are able to respond timely to crop-raiding incidences thereby saving the farms from destruction and also saving the lives of the elephants which used to suffer revenge killings.

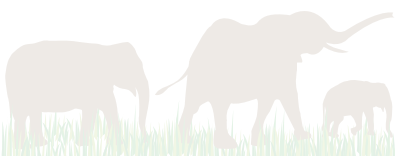Dauda Yahaya, Ranger,
Mole National Park, Ghana

Table 2: List of problems commonly experienced by local communities living in close proximity to elephants with suggested solutions as identified by range States.

Problem	Strategy	Responses
Human-elephant conflict	Preventive and mitigation strategies	• Use of appropriate methods to prevent and mitigate human-elephant conflict could provide effective protection against elephants; • Preventative rather than mitigation measures should be favoured as they provide a more proactive approach to resolving human-elephant conflict. The planning of land use is especially critical for preventing human-elephant conflict.
Food scarcity	Coping and alleviating mechanism for farmers and local communities	• Developing communal projects to leverage the shared security of fields; • Developing skills through alternative sources of income; • Cooperative guarding of crop fields by farmers.
Attitudes and perception among local communities	Partnerships and trust between local communities, wildlife enforcement authorities, major groups and the private sector	• Reinforcing joint efforts for conservation to eliminate negative perceptions that authorities care more about elephants and poaching and less about local communities and human-elephant conflict. • The taking of prompt and appropriate action by authorities in response to human-elephant conflict.
Limited information and understanding on the behaviour, spatial and population factors of elephants	Data collection and analysis of biophysical and socioeconomic data by wildlife authorities	• Sharing knowledge on how to effectively respond to attacks by or interaction with elephants, especially for local communities and rangers; • improving the quality of information for policymaking and on conservation enforcement through better informed management; • Improving the implementation of protection and conservation projects.

8

Effectively implementing the African Elephant Action Plan

Adhering to sets of procedures for monitoring, evaluating and reporting on the implementation of the AEAP ensure the long-term effectiveness and successful execution of elephant conservation and management strategies.
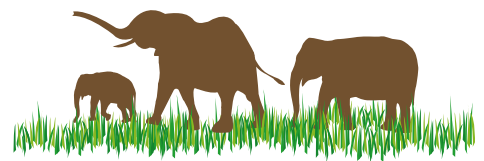
Photo Credit: Casey Allen | Unsplash

Ideas and strategies must be constantly evolving in order to support projects for behavioural, structural or institutional change. Plans must therefore be constantly monitored, reevaluated and amended in order for activities to be successfully carried out. The dynamic demonstrated by the interaction between a multitude of factors and actors is crucial to determining the sustainability of the initiatives.

Hence, for the AEAP to succeed in its main objective to secure the future of African elephants, strategies and mechanisms for implementing the AEAP that are in place must include adequate and sustainable arrangements to review the projects to ensure that they are reported on, monitored and evaluated.

To ensure that the first seven objectives of the AEAP are met and to improve the monitoring, evaluation and reporting processes, the range States have prioritized strategies that include:

AEAP strategies for objective VIII:

Strategy 8.1: Establish a sustainable funding mechanism to implement the African Elephant Action Plan.

Strategy 8.2: Develop and implement monitoring indicators.

Strategy 8.3: Link the African Elephant Action Plan with the African Elephant Fund.

AEAP in the regions:

All range States:

While using various systems and methodologies, all AEAP project-led initiatives by governments and non-governmental and intergovernmental organizations within African elephant range States submit progress reports on activities within their jurisdictions. These reports are circulated to national project management committees, ministries of environment or departments of national parks that are responsible for species conservation so that they can monitor the implementation of the AEAP and other elephant plans in regional and national range States, to ensure remedial action where necessary.

These periodic evaluations of self-financed or joint initiatives are pivotal as they indicate the progress of projects and the possible review of strategies and updating of plans. This could include such areas as population status and movements, the identification of their human, financial and technical capacity needs; the coordination of projects and staff and enforcement measures; the sustainability of activities; and the pooling of resources from range States to implement the AEAP.

Outputs include:

1. Strategy for the Conservation of Elephants in Central Africa 2005-2015 adopted by all Central African range States in 2005;
2. Conservation and management strategy for the elephants in Kenya, 2012-2021;
3. Ethiopian elephant action plan, 2015-2025;
4. Zimbabwe national elephant management plan, 2015-2020.

Results include:

• Improved knowledge on elephant distribution, showing an increase in the proportion of known cover of the range of elephants from 63 to 67 per cent with significant expansion of the range in Botswana and Kenya (Thouless, 2016, p. 7);
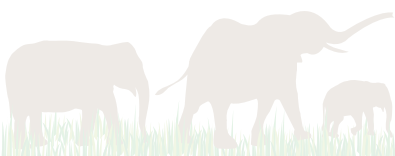
- Report of a continent-wide decrease in elephant populations in the last decade – with an estimated decrease of nearly 100,000 elephants since 2007, with estimates for 2007 at over 500,000 and these dropping to 400,000 in 2016 (Thouless, 2016, p. 7).

All range States:

Similarly, the African Elephant Fund, developed through concerted efforts by African elephant range States, UN Environment and CITES, has been working to implement the African Elephant Action Plan to protect Africa's elephants from threats to their populations and habitats.

Through the review of projects from range States and the allocation of funding for their implementation, the Fund has served as a mechanism for the sustainable resourcing of AEAP projects.

Outputs include:

1. Organization of eight African Elephant Fund Steering Committee meetings to review over 80 proposal submissions and selection of 37 projects in 23 range States for funding projects on the conservation and management of elephants;
2. Allocation of over $2 million for projects, strategic fundraising initiatives, Fund agenda forums and technical consultations to enhance the implementation of the AEAP in range States;
3. Participation in multilateral deliberations among range States to review the strategies and activities of the AEAP for the periods 2009–2012 and 2014–2024;
4. Development and endorsement of two resolutions during meetings of the United Nations Environment Assembly on strengthened cooperation among range States and the international community with the aim of addressing and curtailing illegal trade in wildlife and wildlife products: resolution 1/3 on illegal trade in wildlife (UNEA-1, 23-27 June 14), and resolution 2/14 on illegal trade in wildlife and wildlife products (UNEA- 2, 23-27 May 2016);
5. Development and endorsement at the twelfth meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS CoP12, 23-28 October 2017) of the draft CMS resolution on adoption of the African Elephant Action Plan to enhance collaboration among the CMS parties and the African elephant range States in the implementation of the AEAP.

Results include:

- United Nations Environment Assembly resolutions 1/3 on illegal trade in wildlife and 2/14 on illegal trade in wildlife and wildlife products;
- Increase in donor partnerships from an initial two in 2011 to seven in 2017;
- Increase in donor contributions from $174,908 in 2011 to $2,213,787 in 2017;
- Review of the strategies and activities for the implementation of the African Elephant Action Plan from its initial projected budget of $97,350,000 for 2009–2012 to the current plan and projected budget of $372,314,800 for 2014–2024.

Collectively, within the current system and with the use of new or improved mechanisms, greater collaboration on joint initiatives and strengthened governance on the conservation of Africa's elephant will help ensure their protection and guarantee a safer future for the species.

> It is my sincere belief that species conservation can only be successful in partnership with the people living with wildlife in the long term. The African Elephant Fund, in this regard, remains an excellent example for enabling that ownership.
>
> Germany supported the establishment of the [African Elephant] Fund from its onset and continued to provide financial resources for conservation measures. These investments have been well placed. Today, we look into a wide range of projects implemented or ongoing, addressing all objectives of the underlying action plan. Furthermore, trans-boundary and regional initiatives arose, which contribute to a united African voice for the African elephant.

Frank Barsch,
Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

Recommendations

Implementing the African Elephant Action Plan and securing the future of Africa's elephants is not an endeavour that countries can embark on in isolation. Cooperation and collaboration involving a multitude of stakeholders across numerous sectors and their interaction and influence on institutional frameworks are imperative for successfully restoring, where possible, elephant populations and their habitats.

An initial step in furthering actions to effectively implement the AEAP must include enhancing the systems and strategies which are already in place. This includes the development and revision by range States of national development strategies and plans for the conservation of their elephant populations. That said, however, for the development of similar initiatives, projects should have either single-focus or combined strategies which include:

- Enhancing national initiatives through the building of awareness on self-funded projects – By informing the public and major influential figures, such fundraising mechanisms can ensure sustainability of programmes and projects carried out by national governments and non-governmental and intergovernmental organizations;
- Strengthening partnerships with regional and neighbouring states for collaboration on projects – In so doing, such strategies pool resources with a view not only to improving the management of cross-border populations, but also to strengthening border protection for the better monitoring of wildlife trafficking and illegal trade in ivory;
- Increasing the potential for international intervention on independent or joint programmes – This strategy ensures not only additional financial contributions, but – at the international level – aims to push for the national ratification of policies, agreements and instruments for the conservation of elephants.

Hwange National Park Zimbabwe
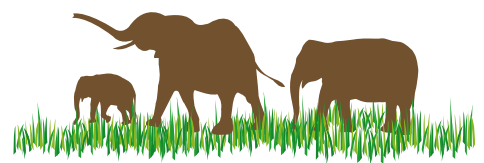Photo Credit: Christine Donaldson | Unsplash
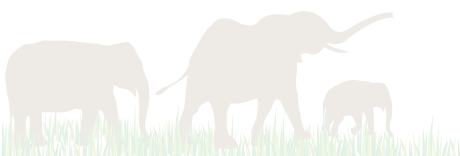
Way forward

Only through collective action can we protect our African elephants and secure their future for generations to come.

Ngorongoro, Tanzania
Photo Credit: Matthew Spiteri | Unsplash

The approved projects under the African Elephant Fund have been successful in their implementation of the AEAP in the regions. Thanks to the innovative approaches, dedication and partnerships of the African elephant range States in fostering the capacities of each country to conserve and manage elephants, the AEAP has been effectively implemented. The equipping and training of anti-poaching units to conduct exercises at protected areas, training of personnel in the use of elephant monitoring and tracking software, the development of technologies for improved monitoring of elephants and biodiversity, the establishment of programmes and workshops to engage stakeholders and raise awareness on wildlife enforcement, the negotiation of commitments and resolutions for wildlife protection, and the development of simple and replicable measures for mitigating conflict between humans and elephants are some of the achievements by range States in their efforts to ensure the sustainability of elephant populations and their habitats.

Highlights: AEAP achievements through the African Elephant Fund

- Conduct of the first aerial census survey of elephants in north-west Namibia in over 20 years;
- Review of wildlife laws and strict enforcement of sentencing for prosecuted poachers and traffickers in Ethiopia;
- Zero cases of crop raiding and zero elephants moving outside the Thurma Forest Reserve in 2016 following the erection of the 12 km solar-powered electric fence in Malawi;
- Success in mitigating human-elephant conflict and increasing household income in the United Republic of Tanzania by installing 200 top beehives to serve as a bee fence bordering Challa and Ngoyoni villages;
- Making Gabon self-sufficient in the traceability analysis of ivory;
- Training of over 300 enforcement personnel in Ethiopia and Ghana in the conduct of anti-poaching missions and the identification, collecting and handling of wildlife products;
- Recognition by CMS member States of the significance of adopting the AEAP;
- Adoption of resolutions 1/3 on illegal trade in wildlife and 2/14 on illegal trade in wildlife and wildlife products by the United Nations Environment Assembly at its first and second sessions, respectively.

Moving forward: tackling the threats to African elephant populations

Threats to the African elephant and their habitats are escalating to unprecedented levels as a consequence of the decimation of populations, illegal ivory trading, habitat loss and the fragmentation of land. New approaches must be found to respond to these cumulative threats caused by the demands for ivory and urbanization, possibly involving the new demarcation of boundaries and the review of regulations to curb encroachment on conservation areas.

By adopting preventive measures, it may be possible to remedy the current deteriorating circumstances which are leading to a possible future without elephants. Taking steps to combat these threats may be difficult and in some cases require unpopular decisions, but the consequences of not acting outweigh the potential backlash from actions taken.

Moreover, enhanced political will and governance in the domain of wildlife management are critical for supporting the efforts to restore, where possible, elephant habitats and to secure elephant populations. The enforcement and regulation of commercial activities such as domestic trading, of the promotion of good land-use practices, of effective border protection and of the conduct of rigorous investigative procedures all play a key role in curtailing criminal activities, preserving habitats, managing corridors, and raising public awareness of the need for elephant conservation. Existing political and economic platforms, such as the African Union Commission COMIFAC, EAC, ECOWAS, and SADC, have played and should continue to play a key role in setting the stage for enhanced cooperation in promoting good practices in management of our biodiversity.

In addition, the mobilization of resources is of equal importance to success in prioritizing not only the implementation of the AEAP but also the sustainability of strategies and actions to ensure the adequate management and conservation of parks, corridors and habitats, the conduct of research and the design of new technologies for the protection of elephants. Technical and financial support from donors, partners, non-governmental and community-based organizations and the private sector should be reinforced as these entities are all key to safeguarding the future of our elephants.

Lastly, the successful implementation of the activities and strategies of the AEAP should be revised and updated as necessary across the continent, taking into consideration political, economic and social shifts relating to conservation of the African elephant. A more resilient and flexible approach to our ever-changing spaces should be fostered to enable us to develop counter-measures for effective implementation of the AEAP.

Addo Elephant National Park, South Africa
Photo Credit: Tobin Rogers | Unsplash

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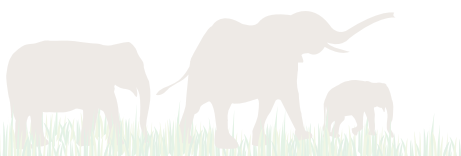
African Elephant Fund Steering Committee and Secretariat

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Solomon Kyalo,
Kenya

Dawud Mume,
Ethiopia (Vice Chair)

Thea Caroll,
South Africa

Cyril Taolo,
Botswana

Abednico Macheme,
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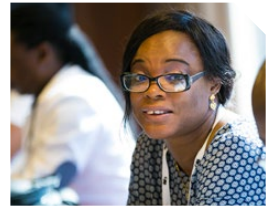
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Joyce Mwea,
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African Elephant Fund Steering Committee (AEFSC) in action

1st African Elephant Fund Steering Committee (AEFSC), Bangkok, Thailand, March 2013

Group photo of 7th African Elephant Fund Steering Committee (AEFSC) Gabon, in June 2016

Mamadou Kane and UNEP Ambassador Yaya Toure, in June 2015, Kenya

Lee White (Gabon), presenting Gabon Biodiversity Publication to 7th AEFSC meeting participants

Participants from Botswana and CITES - MIKE at the 7th African Elephant Steering Fund Committee (AEFSC)

4th African Elephant Fund Steering Committee meeting in session in Tsavo West in November 2014

7th African Elephant Fund Steering Committee (AEFSC) in session, hosted by Gabon in June 2016

African Elephant Fund Steering Committee (AEFSC) in action

Donors at 7th African Elephant Fund Steering Committee (AEFSC), hosted by Gabon in June 2016

Mamadou Kane (UN Environment) and Patrick Omondi (Chair of AEFSC) at 7th (AEFSC) meeting in Gabon

4th African Elephant Fund Steering Committee (AEFSC) in session, hosted by Kenya in Tsavo West in November 2014

Ranger fixing the fencing to deter elephants from crossing

Group photos of the participants at the 4th African Elephant Fund Steering Committee meeting

5th AEFSC successfully concluded with 8 projects approved for funding

Representative of South Africa speaking at the African Elephant Fund side event: The Elephant in the Room: A Coherent Approach to the Implementation of the African Elephant Action Plan at the 17th Conference of Parties for CITES in Johannesburg, South Africa

Increased threats to African elephants resulting from the illegal killing of elephants, illegal trade in ivory, human-elephant conflicts, loss and fragmentation of habitats jeopardize their protection and harmonious coexistence with humans.

To address these alarming concerns, the African elephant range States have formulated strategies for the conservation and management of elephants, known as the African Elephant Action Plan.

Concerted efforts are being made by the African elephant range States, the United Nations Environment Programme, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and its Monitoring of Illegal Killing of Elephants (MIKE) programme to carry out the African Elephant Action Plan and ensure a secure future for the African elephants and their habitats.

The African Elephant Fund was created to support the African Elephant Action Plan in carrying out strategies for protecting and restoring elephant populations and their habitats where possible.

To find out more, visit africanelephantfund.org

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