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Mid-Term Review of Progress in Implementing the Conservation and Management Strategy for the Elephant in Kenya (2012 - 2021)



Compiled by

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With support from



EXECUTIVE SUMMARY

Key messages

This report offers a first systematic review of implementation progress of the National Conservation and Management Strategy for Elephants (2012 – 2021). **Progress towards meeting the National Elephant Strategy (NES)** goal, seven strategic objectives, 31 targets and 138 actions were analyzed using a scorecard approach. The scorecard reflects the required levels of action at national level, but the extent of actions needed, varies widely across designated regions. For many targets and actions, the analysis shows that without increased focused effort, none of the NES objectives and examined targets will be met, and therefore risking the viability of elephant populations in Kenya.

The past 26 years have seen significant progress in elephant conservation and management after its population plummeted from 167,000 in 1970's to about 16,000 in late 1990's. The population has since increased to about 35,000 individuals. This progress is reflected in an important body of reforms and innovative policies in conservation and other sectors that impact on conservation. Since the commissioning of the NES, the overwhelming majority of key players in elephant conservation and management including KWS, conservation NGOs, tourism investors, relevant government Ministries and local communities have implemented some components of NES, and have engaged in the regular reporting of their progress albeit poor coordination. Initiatives have been carried out to recruit and build the capacity of the key stakeholders involved in elephant conservation. Consequently, most stakeholders have adopted specific conservation policies and have established civil society machineries to apply affirmative action measures to foster local community's participation in conservation of natural resources.

The effects of those reforms on elephant conservation and management are seen in a great variety of ways, including improved elephant protection, secured habitat, conflict mitigation, increased capacity of stakeholders, awareness, and economic benefit sharing. However, recurrent manifestations of human-elephant conflicts remain a serious threat due to competing non-compatible land uses.

The results show that:

- Strategic, integrated and holistic actions are needed to raise national elephant conservation and management ambitions and strengthen focus on balancing human and elephant needs;
- Reducing human-elephant conflicts (HEC), halting range and habitat loss and fragmentation, and ensuring ecological connectivity, remain the biggest threats to elephant conservation;
- Without increased effort, none of the NES objectives and examined targets will be met and if current trends continue, certain elephant populations will become confined to isolated protected areas;
- Elephants in forest habitats in particular, have received no attention and support since 2012, except for Mt Kenya where a total survey was conducted in February 2016;
- Areas such as Amboseli, Mara ecosystem, Samburu-Laikipia, etc. receive substantial support from Civil Society (NGO's) but regardless, each of these regions struggle with area-specific problems;
- Most NES targets will not achieve half of the pre-defined objectives by 2022. A large number of targets are classified as 'unfinished business', and actions will need to accelerate many fold for outcomes to be achieved in time. A considerable number of pre-defined outcomes, actions and Targets require outright "re-assessment" and "re-evaluation" because no implementation happened since 2012. These include increasing benefits to the communities, change of community attitudes, harmonizing conflicting sectoral laws and policies, human population control and combating climate change;
- The greatest cause for optimism can be found in projections on ending poaching and illegal elephant trade as a result of increased investments and actions to tackle this problem. If other threats were given similar attention and support, we would get much closer to reaching the set goal.

The findings serve as a wake-up call on just how much more effort will be needed to reach the set goal with increasing threats to elephants. This report has more specific recommendations in respective areas and in the monitoring framework. However, in order to succeed, the following key high level recommendations are made;

- ✓ There is need to strengthen the elephant program coordination office to effectively monitor the implementation of the Kenya 10 year national conservation and management strategy for elephants.
- ✓ A proper monitoring and evaluation system needs to be put in place to capture all the actions undertaken towards the implementation of strategies and for easy analysis and generation of reports for informed decisions.
- ✓ Secure critical elephant corridors and habitat to allow free movement between key elephant range and ensure connectivity.
- ✓ Strengthen the role of communities, relevant government sectors and both conservation and development partners and bordering countries with trans-boundary elephant population in the implementation of the NES through data sharing, resource mobilization, policy review and enactment, benefits sharing mechanism, among others to ensure sustainable elephant conservation and management.



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Acronyms and Abbreviations

AfESG: African Elephant Specialist Group (IUCN-SSC) AEMP: Amboseli Ecosystem Management Plan

AMC: Area Management Committee	CBNRM: Community-Based Natural Resource Management
CBO: Community-Based Organization	CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora
CEC: County Environmental Committee	DD-BRM: Deputy Director - Biodiversity Research and Monitoring
DD-S: Deputy Director – Security	DD-WCS: Deputy Director – Wildlife and Community Service
EEC: Elephant Executive Committee	EIA: Environment Impact Assessment
EMC: Elephant Management Committee	EPC: Elephant Programme Coordinator
ETC: Elephant Technical Committee	ETIS: Elephant Trade Information System
EU: European Union	FR: Forest Reserve
GoK: Government of Kenya	GR: Game Reserve
GSA: Game Scout Association	HEC: Human-Elephant Conflict
HWC: Human-Wildlife Conflict	INTERPOL: International Criminal Police Organization
IUCN: International Union for Conservation of Nature	KFS: Kenya Forest Service
KPR: Kenya Police Reserve	KWCA: Kenya Wildlife Conservation Association
KWS: Kenya Wildlife Service	KWSTI: Kenya Wildlife Service Training Institute
LATF: Lusaka Agreement Task Force	MIKE: Monitoring the Illegal Killing of Elephants
NBSAP: National Biodiversity Strategy and Action Plan	NEMA: National Environmental Management Authority
NGO: Non-Governmental Organization	NP: National Park
NR: National Reserve	PA: Protected Area
PAC: Problem Animal Control	PAMU: Problem Animal Management Unit
PES: Payment for Ecosystem Services	PIKE: Proportion of Illegally Killed Elephants
REDD: Reducing Emissions from Deforestation and Forest Degradation	SMART: Specific, Measurable, Achievable, Realistic, and Time-bound
STE: Safe The Elephant	SSC: Species Survival Commission (of IUCN)
TRAFFIC: The Wildlife Trade Monitoring Network	



Protestors rally against ivory auction



NewsHub Live At 8pm
Anti-poaching father and son shot dead
 Tuesday 13 Mar 2016 7:05 a.m.



A. Introduction

Kenya supports a population of over 32,000 savannah elephants, a species of considerable economic, ecological, cultural and aesthetic value and the world's most charismatic mega-herbivore. They possess extraordinary intelligence, complex social structures and remarkable abilities to adapt to their surroundings and are unique 'keystone' species and natural habitat engineers. However, the future for African elephants is bleak as a result of a multitude of threats, including illegal killing for ivory and other products, conflict with humans, local overabundance, the loss and fragmentation of habitat. To address these threats, Kenya Wildlife Service (KWS) in consultation with relevant partners and stakeholders developed a 10-year National Conservation and Management Strategy for Elephants (2012 – 2021) (the 'Strategy').

The Strategy outlines a goal, seven broad objectives, each with specific actions and measureable targets to gauge performance. KWS partnered with conservation and development partners, investors and local communities to achieve the seven key objectives including: (a) Elephant protection; (b) Population expansion and habitat maintenance; (c) Research and monitoring for management; (d) Human elephant conflict; (e) Incentives; (f) Capacity; and, (g) Coordination and support (**see Annex 1**).

Achieving the 31 actions, and meeting the 149 measureable targets in the Strategy requires an integrated approach, to ensure that the multiple and complex threats and challenges facing elephant conservation and management in Kenya are addressed (Elephant Strategy, 2012). Hence, consolidation of different ad hoc activities being implemented by partners and stakeholders across the elephant range is key to this evaluation process.

With four years into the implementation of the Strategy KWS, wants to assess the progress towards meeting the objectives, and to understand the impact of implementation programs in terms of addressing the threats. KWS commissioned this review to undertake a mid-term evaluation and collect feedback from the practitioners

about their perception of the status of implementation of the Strategy and to identify implementation successes, gaps, and to address the emerging challenges.

Purpose, objectives, and intended utilization of the evaluation

The review of the implementation status of the Strategy was one of the key outcomes during the inaugural National Elephant Conservation Conference, held in February 2015. The purpose of this review, is to: evaluate the progress made towards the achievement of the goal and objectives of the *Conservation and Management Strategy for the elephants in Kenya (2012-2021)*(**Annex 1**).Evidence collated from the stakeholders involved in implementation of the Strategy will be used in the review as well as examining the impact achieved by the Strategy as well as its design, relevance, effectiveness and efficiency, and make recommendations for the remaining period of the Strategy that will ensure achievement of the set goal and objectives.

The Strategy is due to be reviewed bi-annually, however, since 2012 this has not happened. This review process identifies the status of implementation of the Strategy and provides the necessary recommendations that will ensure achievement of the goals by the end of the Strategy period in 2021.

The review will also provide an important tool for focusing fundraising on any critical threats that have not been adequately addressed. In particular, with new funding streams now available through the Elephant Protection Initiative (EPI) and other donors, this review provides a good opportunity to also develop funding proposals for the actions identified as priorities in the revised Strategy to ensure their timely implementation. This is also in line with the African Elephant Action Plan (2010) and it also feeds into the KWS Strategic Plan 2012- 2017 (KWS, 2012).

More specifically, the following evaluative questions were investigated:

- Does the threats analysis which informed the *Conservation and Management Strategy for the Elephant in Kenya (2012-2021)* and resulting theory of change remain valid? If not, how should these be updated and what are the impacts for the Strategy?
- What progress has been made toward implementation of actions outlined in the *Conservation and Management Strategy for the Elephant in Kenya (2012-2021)*? What are the reasons for levels of progress?
- Based on the progress to date, is it likely that the goal and objectives outlined in the Strategy will be achieved? What are the reasons for this? Should the goal and objectives be modified and, if so, how?
- Are the stakeholders involved in implementation of the Strategy appropriate? Do they hold the necessary skills and capacity? If not, what can be done to improve this? Are there additional stakeholders that should be involved?
- What recommendations are made for the remaining period of the Strategy?

Evaluation Methodology and Rational for Approach

Consultative and participatory processes were employed during the review process with the relevant partners and stakeholders for ownership of the report and to ensure every aspect of elephant conservation project / program is captured for a balanced outcome. Specifically, the review process adopted the following methods;

- (a) Structured interview with elephant committees i.e. EEC, ETC, EMC and AMC (**Annex 1 – Section A**).
- (b) A questionnaire survey with KWS senior management and conservation NGOs including African Wildlife Foundation (AWF), World Wide fund for Nature (WWF), IUCN, Safe The Elephant (STE), The Nature Conservancy (TNC), Mara Elephant Program (MER), African Conservation Centre (ACC), Amboseli Trust for Elephants (ATE), Elephant Voices, Wildlife Direct, Lewa Conservancy, North Rangeland Trust (NRT), Tsavo Elephant Trust (TET), among others (**Annex 1 – Section B & E**). The questionnaires were circulated by email to the lead persons or experts.

- (c) Interviews with the County Government Chief Executive Officer (CEO) and /or Chief Officer (CO) Lands and Natural Resources and County Wildlife Compensation Committees (**Annex 2 – Section C**). County governments are currently developing spatial plans which are important in designating conservation areas and various land uses and some Counties manage the key national and game reserves in the country.
 - (d) Trans boundary elephant population key informant interviews with Tanzania and Uganda wildlife agencies and practitioners to update the monitoring framework (**Annex 1 – Section D**). This provided useful information on the progress of implementation at area level which then informed the overall implementation status.
 - (e) Key informant interviews with field practitioners and stakeholders in six sampled KWS Conservation Areas where the monitoring framework was updated and more leading questions for clarity, challenges, mitigation, etc derived (**Annex 1 – Section E**). This provided useful information on the progress of implementation at area level which then informed the overall implementation status.
 - (f) Desk review of the status of implementation of all Actions in the Strategy based on the Implementation Framework that has been developed (**Annex 5**). Also see reference for a list of documents consulted.
- The data collected was then analyzed and a draft evaluation report produced for adoption by the national stakeholders' forum.
- (g) A national stakeholder's workshop was held between 6th and 7th April 2016 at KWS to share the findings of the Strategy review and to enrich it (**Annex 6**). The workshop was facilitated by Foundations of Success, with support from WCS, IUCN, Stop Ivory and KWS.

Evaluation Team

The evaluation team comprised of a lead consultant, Dr Noah Sitati, an elephant expert and participated in the development and implementation of the National Elephant Conservation and Management Strategy, 2012 – 2021. The role of the lead consultant was to develop the review tools and detailed methodology for the assignment, interview

key respondents, conduct regional meetings with stakeholders and partners, analyze data collected, compile a report and finally share the findings in a national stakeholders forum.

The KWS Elephant Coordinator, Sospeter Kiambi, provided logistical support to the evaluation process including providing useful data, organizing and facilitating regional meetings, sharing useful contacts for interview and organizing the national stakeholders' forum.

Technical support to the process was also provided by a small team comprising of KWS Deputy Director Species, Stop Ivory, WCS and Disney. Foundations of Success facilitated the stakeholders' workshop and also provided input into the tools and also documented the workshop proceedings (**Annex 6**).

Challenges encountered during evaluation

- The time allocated for the exercise was initially too short and especially field visit considering the area of coverage and the many actions in the Strategy to be reported against in a quantitative manner. However, this was extended after the workshop through a planning meeting on the finalization of the Strategy by WCS, KWS and Disney in order to visit the remaining regions namely Mountain Conservation Area, Eastern Conservation Area and Coast Conservation Area. Though only six out of eight Conservation Areas were visited. This would have been important since each area had its unique challenges which were captured best during field visits.
- Most key partners failed to attend the meetings in their respective conservation areas, primarily due to short notice of meetings and understanding of their importance.
- The support staffs in the Strategy development process were heavily involved in the development of the ivory stock pile disposal process, which was conducted simultaneously with the strategy review process hence causing delay in the review process.
- There was inadequate response from the Heads of the various sections within KWS who were identified as crucial for providing information on the status of implementation.

- Poor record keeping by the various KWS sections and other conservation organizations making quantification of the status of implementation of some actions difficult. As a result, there was poor response and inadequate information from the field on the status of implementation as captured in the monitoring framework.
- Ranking of the status of implementation of the Strategy is rather complicated due to poorly stated actions which are not SMART and subject assessment was employed.
- There were no annual work plans and annual reports as required by the Strategy to provide a quick feedback on the progress of implementation especially by KWS.

B. Project/Program Overview

Elephant Program Vision, Goal, Objectives, and strategies to achieve conservation goals

This section presents a concise summary of the Elephant Programs history, evolution, purpose, objectives, and strategies to achieve conservation goals, and referring to the detailed Strategy monitoring framework (**Annex 5**).

The Elephant Program has existed at KWS since the 1990's , which started to keep a database of elephant mortalities in Kenya as well as elephant related human deaths and injuries. This was after the realization that elephants were now facing serious anthropogenic related threats including poaching for ivory, human-elephant conflicts and retaliatory killings and habitat and range loss and fragmentation. The elephant population plummeted from 165,000 in 1970s' to about 16,000 in 1990s' (NEAP, 2012).The KWS Policy Framework and Development Programme 1991-1996, otherwise called KWS 'Zebra Books 'was not comprehensive enough to tackle the threats and challenges facing elephant conservation and management in Kenya. With support from the government and non-Governmental organizations, an elephant strategy development process was initiated in 2007 and took about four years before the National Conservation and Management Strategy for Elephants (2012 – 2021) was launched by KWS.

It development involved a rigorous consultative process with all key stakeholder and partners within the elephant ranges in the country, they came up with a declaration which binds everybody to the development of the Strategy and the support towards its implementation (**Box 1**).

Box 1: National Elephant Strategy stakeholder's declaration

Recognizing the input from a wide range of stakeholders through the regional consultation process and the need of all stakeholders to be involved in the conservation of African elephants in Kenya;

And realizing the paramount importance of reducing human-elephant conflict for the future well-being of the people of Kenya and their harmonious coexistence with species like elephant;

And recognizing the remarkable achievements of all of those dedicated to the effective conservation of Kenya's elephants;

And realizing that a sustained strategic and cooperative approach to conservation and management of this species is necessary for continued success;

And recognizing the need to base Strategy on sound science;

The agreed Vision for the Strategy is ***“A secure future for elephants and their habitats, based on peaceful and beneficial co-existence with people, now and for generations yet to come”***.

The overall goal of the Strategy is to ***“Maintain and expand elephant distribution and numbers in suitable areas, enhance security to elephants, reduce human-elephant conflict and increase value of elephants to people and habitat”***. While this goal sounds ambitious, it is the only way the elephant threats and challenges could be addressed.

In order to achieve the conservation goal, seven strategic objectives were derived as outlined in Box 2 below.

Box 2: Strategic Objectives

- **PROTECTION:** Protect elephant populations by minimizing poaching through **effective law enforcement measures and stakeholder collaboration**
- **POPULATION EXPANSION AND HABITAT MAINTENANCE:** **Maintain and expand elephant distribution and numbers** in suitable habitat where appropriate.
- **RESEARCH AND MONITORING FOR MANAGEMENT:** **Strengthen existing monitoring systems and conduct priority research** to provide information for adaptive management and protection of elephants and critical habitats.
- **HUMAN ELEPHANT CONFLICT:** **Enhance HEC mitigation by involving stakeholders** at all levels in the use of appropriate site specific methods
- **INCENTIVES:** **Provide meaningful benefits** that will encourage landowners and local communities to tolerate protect and accommodate elephants.
- **CAPACITY:** Sustain an effective resource capacity through **collaborative efforts among stakeholders** with a strategic focus on priority areas.
- **COORDINATION & SUPPORT:** Implement an **effective coordination framework** to support stakeholders and enhance decision making and action.

These objectives are anticipated to be achieved by focusing efforts and resources on the 31 specific actions. In order to measure the performance of each action, there are 149 associated set of measurable targets (Figure 1). The numerous actions and targets for a single species makes the Strategy rather ambitious but it is complex and requires integrated and holistic approaches due to the nature of the threats and the multi-disciplinary and sectorial approaches employed to mitigate the threats. The numerous indicators, although some are not well stated, are useful in measuring the level and status of action taken which could also be linked to the impact. Hence, the Strategy tackles all the complex problems including climate change, local livelihoods and political good will.

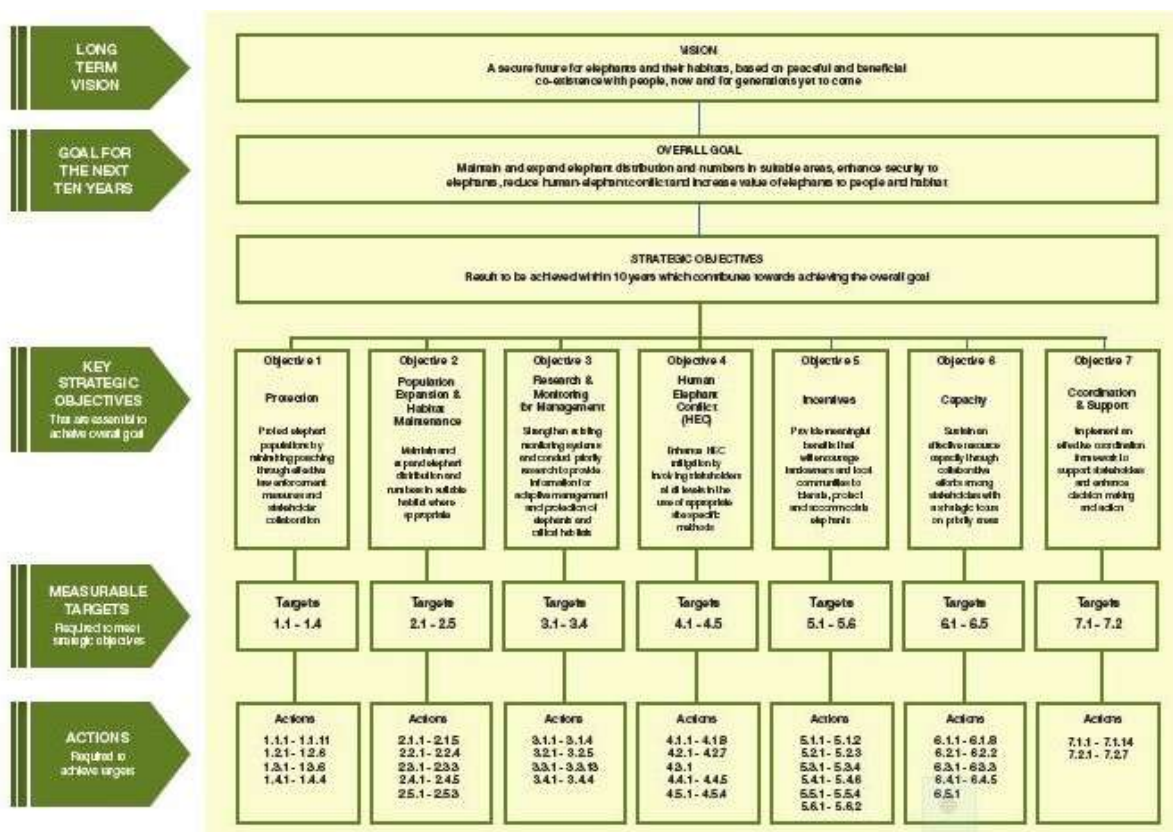


Figure 1: Vision, goal, objectives and format of targets and actions in the elephant Strategy

Essential characteristics: context, underlying rationale, stakeholders and beneficiaries

Stakeholders and conservation partners in collaboration with KWS have been implementing the Strategy either knowingly or unknowingly. In order to realize the positive impact of the implementation of the Strategy, the elephant population should be seen to be increasing or stable. However, reliable trend data are available only where time series of good quality estimates are available. This is the case for a limited number of well-studied populations in Tsavo, Amboseli, Meru, Masai Mara and Samburu / Laikipia. The annual population growth in the five key elephant ranges grew by 2.4%

(Mara), 3.5% (Tsavo), 3.8% (Amboseli), 4.3% (Meru) and 6.25% in Samburu / Laikipia being the highest annual growth rate (NEAP, 2012). This is when the population was recovering the infamous poaching of 1970s' and 1980s' when wildlife was management by the ill trained and poorly equipped Wildlife Conservation and Management Department.

According to the NEAP (2012), these population trends, however, should not be taken as an indication of the national elephant population; they are simply the only ones with a reasonable time series of good quality data and this selection is likely to be biased towards better protected populations. To date, these are the same regions with the most recent elephant surveys. Many elephant ranges especially in the forest type of habitat have been neglected with the last surveys being for instance 1995 for Mau elephant population which apparently are being used to give an indicative estimate of the national elephant population.

In 1990, KWS established a centralized Elephant Mortality Database at KWS headquarters in order to determine the elephant mortality which is a key factor affecting elephant population status. Between 2000 and 2009, 3,730 elephant mortality incidences were recorded caused by poaching (1,340) and other causes (e.g. natural, human-elephant conflict, etc) accounting for 2,390 deaths. With the recovering of the elephant population after poaching and KWS being established by an Act of parliament in 1989, Between 1990 and 2002, the average PIKE value was 35.3% (Thouless et al., 2008) which remained high at 35.9% over the period up-to 2009 (NEAP, 2012) which was below the average PIKE value. Poaching started to escalate when China was allowed to buy ivory from southern African countries in 2008. Since then poaching incidences have been increasing with the peak being in 2012 where 384 elephants were killed for ivory compared to 93 in 2015.

According to the rank ordering of PIKE, the elephant populations of Coast (south of Tana River), Tsavo, and Southern were known to be relatively well protected. However, the populations of Mt. Elgon, Central Rift, Meru, Northern, Samburu-Laikipia and Mountain regions were known to be poorly protected and experienced high levels of

HEC. This scenario, however, may change depending on the circumstances on the ground but it is useful in terms of resources allocation and increased efforts. Poaching remained a major threat in the northern region due to many illegal firearms in the hands of local communities, largely caused by the breakdown of law and order in Somalia.

Increasing elephant population demands for more range and quality habitat. Considering that over 60% of the elephant population is found outside protected areas on peoples land, the same range is under severe competition with human activities. Hence, estimating and evaluating the quality of the range of elephant populations is central to their conservation. In 2002, Kenya had potential elephant range of 109,067km² which reduced to 107,113km² by 2006 which show an insignificant decrease. Considering the changes that are happening within the elephant range, this change may not be a true reflection of the current status of habitat and range loss. It remains impossible to define accurately the boundaries of an elephant population range in Kenya since some populations have been neglected for many years while the use of conflict incidences may not be a true indication of the elephant range. Hence, the elephant range remains arbitrary and is not an accurate assessment of the actual area used by elephants. This is more so in remote areas especially in the northern part of the country with low elephant density and very little presence of KWS and conservation organizations. The once contiguous elephant range in Kenya has now been highly fragmented into 10 ranges between 1925 and 1990 that remain isolated (Parker & Graham, 1989).

The change in elephant range is attributed to many factors. Firstly, following the improved security and reduced hunting of elephants from the 1990s onwards, elephants ventured back into areas they had previously occupied. Secondly, fragmentation of elephant range and blocking of movement corridors, through changes in land tenure and use is accelerating, as exemplified particularly in the Mount Kenya and Aberdare area and in the former group ranch areas in Narok, Kajiado, Laikipia and Samburu counties. Most of the group ranches have been sub-divided into individual parcels of land and some have already been sold to developers and some have been put under cultivation. This and in the absence of clear policies on land use as well as effective

action by government or conservation bodies in land use zoning, most areas have become entirely isolated from adjacent natural habitat. This formation of closed enclaves, which is entirely preventable, creates serious management problems for the maintenance of habitat and wildlife diversity. Thirdly, increasing human population has put pressure on land for settlement and increased demand for food. Rapid agricultural expansion into the drier areas which are unsuitable for farming due to rain fed agriculture and irrigation has not only blocked most of the elephant migratory corridors but also increased human-elephant conflicts. Some of the isolated range patches are still connected by corridors, which are thought to be of crucial ecological importance and needs to be secured. However, there is need to come up with a more reliable and detailed data on elephant range for future elephant conservation efforts in Kenya.

C. Evaluation Findings and Recommendations

General critique of the elephant Strategy

- Certain sectorial policies and legal frameworks were not adequately addressed in the Strategy although many laws have been enacted after the promulgation of the constitution including the Wildlife Conservation and Management Act 2013 which came into effect in January 2014.
- Realignment of the elephant Strategy with the county policies and laws and development / management plans such as County spatial plans and County Integrated Development plans to secure critical biodiversity is needed.
- There is a disconnect between some actions in the Strategy and indicators where the indicators were wrongly formulated and or vice versa.
- The Strategy does not have budget hence making it difficult to plan for resources and implementation of the actions in the Strategy.
- The Strategy has no baseline information that would inform the status of implementation during a review. Baseline data collection should have been the first implementation activity to undertake a quick baseline survey on key indicators.

- The Strategy falls short of making clear reference to the County governments which manages some protected areas, Community Forest Associations and the Kenya Forest Service, the custodians of key forests where elephants are found.
- A conceptual model, results chain or logical framework are lacking in the Strategy. However, it might be tricky to derive a results chain or conceptual model due to the complex nature of the numerous variables in Strategy.

Evaluation Findings

During interview in the eight KWS Conservation regions, 68 participants were interviewed and a questionnaire circulated to 13 organizations involved in elephant conservation. Feedback from interviews and the written questionnaires summarized below:

- All (100%) respondents felt that lack of funds to implement the Strategy was the biggest undoing. There is no specific budget or funding stream allocated for the implementation of the Strategy and hence the little attention and poor implementation. The meager resources for conservation are used to address all conservation issues with a focus on the priority issues. For instance most resources were channeled to anti-poaching efforts at the expense of other actions in the Strategy.
- The majority (64%) of the people interviewed have never seen the elephant Strategy while 13% have seen but not read it. Only 23% have seen and read the Strategy. Indicating poor and/or lack of awareness and of the Strategy.
- Poor record keeping making it difficult to retrieve some supporting data or information. This was blamed on frequent transfers which is KWS policy and poor handing over during transfers. However, while most conservation areas have tried to maintain their data base of all activities undertaken in their respective areas, their focus has been on elephant numbers, poaching and HEC but forgotten about other crucial data as outlined in the Strategy document. This could also be attributed to the fact that most people have not read the Strategy document.
- The four elephant management committees have remained inactive due to poor coordination and lack of funds especially for the Area Management Committees (AMC) to bring partners and stakeholders together.

- Winning space for wildlife through establishment of over 220 community conservancies across the elephant range to secure more range and corridors for elephants is a clear sign of good will from the community and their scouts are benefiting from employment.
- Habitat loss including connectivity and range, human-elephant conflicts and poaching, range remain the biggest threats to elephant conservation in Kenya and the threats varies between Conservation Areas as shown in table 1 below as analyzed by the Area Management Committees (AMC) during field visits. Other threats include livestock incursion into the protected areas and climate change while infrastructural development is emerging as a new threat especially in Tsavo, Coast and Northern Conservation Areas.

Table 1: Ranking of elephant threats by Area Management Committees in the respective KWS Conservation Areas

Cons. Area	Ranking of Threats			
	1	2	3	4
Southern CA	Range/habitat loss	HEC	Climate change	Livestock
Tsavo CA	Infrastructure development	Range/habitat loss	HEC/livestock	Climate change
Coast CA	Range/habitat loss	HEC	Poaching	Development
Eastern CA	Range/habitat loss	HEC	Poaching	Livestock
Central Rift CA	Range/habitat loss	HEC	Poaching	Climate change
Western CA	Poaching	Range/habitat loss/encroachment	Climate change	HEC
Mountain CA	Range/habitat loss	HEC	Poaching	
Northern CA	Poaching	Climate change	Range/habitat loss	HEC

- There were no major concerns about the review of the goals and objectives which were deemed as adequate. But again it is good to keep in mind that majority of the people have not read the Strategy.
- Conservation NGOs are contributing immensely to the implementation of the Strategy with over 60% of activities being executed by NGOs. However, coordination between KWS and the conservation organizations remains poor and hence crucial data and information is kept with NGOs. Areas without NGOs presence on the ground; like Western CA and some parts of Tsavo and Eastern CA, has setback the delivery of the Strategy there.

Overview of delivery of the strategic objectives

Strategic Objective 1: Protect elephant populations by minimizing poaching through effective law enforcement measures and stakeholders collaboration

Elephant population status

Elephant population in Kenya, has remained fairly stable despite the poaching pressure though the actual population remains unclear since most of the surveys are outdated (Table 2, Figure 2). As at December 2015, there was a national elephant population of 35,149 elephants which represents a 2.73% annual increase since 1989 (KWS, 2016). The population exhibits an upward trend showing a recovering elephant population. Some surveys, although not included in this trajectory such as Mau forest are as old as 1995, over 21 years and this population among other forest populations remain little known.

Table 2: Elephant population estimates in their range areas in Kenya

<i>Input Zone</i>	<i>Survey type</i>	<i>Year</i>	<i>Population estimate</i>
Aberdare Dispersal	Informed guess	2005	1,700
Aberdare National Park	Informed guess	2005	1,840
Amboseli ecosystem	Sample aerial count	2015	1,736
Arabuko Sokoke Forest	Dung count	2002	184
Bisanadi National Reserve	Aerial total Count	2014	0
Boni & Doodori National Reserves	Dung count	2000	50
Chyulu National Park	Sample aerial count	2014	0
Kerio Valley dispersal area	Sample aerial count	2015	311
Kipipiri Forest Reserve	Informed guess	2005	13
Kora National Park	Aerial total Count	2014	0
Lamu District	Aerial total Count	2015	60
Loroki Forest	Dung count	1997	210
Magadi Ecosystem	Aerial total Count	2013	30

<i>Input Zone</i>	<i>Survey type</i>	<i>Year</i>	<i>Population estimate</i>
Marsabit National Park	Dung count	2014	100
Masai Mara Dispersal	Aerial total Count	2014	552
Masai Mara National Reserve	Aerial total Count	2014	876
Mau Forest Complex	Dung count	1995	1,003
Meru Dispersal	Aerial total Count	2014	2
Meru National Park	Aerial total Count	2015	659
Mt Elgon National Park & forest	Informed guess	2002	139
Mt Kenya National Park & forest Reserve	Dung count	2010	3,755
Mwea National Reserve	Aerial total Count	2015	71
Mwingi National Reserve	Aerial total Count	2007	0
Narok North	Aerial total Count	2014	20
Nasalot S Turkana, Rimoi & Kamnarok National Reserves	Sample aerial count	2015	351
North Kitui National Reserve	Aerial total Count	2002	0
Rahole National Reserve	Aerial total Count	2007	27
Samburu-Laikipia ecosystem	Sample aerial count	2015	7,835
Shimba hills ecosystem	Aerial total Count	2012	274
South Kitui National Reserve	Aerial total Count	2011	0
Tana River Delta	Informed guess	2002	20
Tana River Primate National Reserve	Other Guess	2005	30
Transmara forests	Dung count	2007	513
Tsavo Dispersal	Sample aerial count	2014	1,649
Tsavo National Park	Sample aerial count	2014	11,119
TOTAL			35,129

Source: KWS Report (2015)

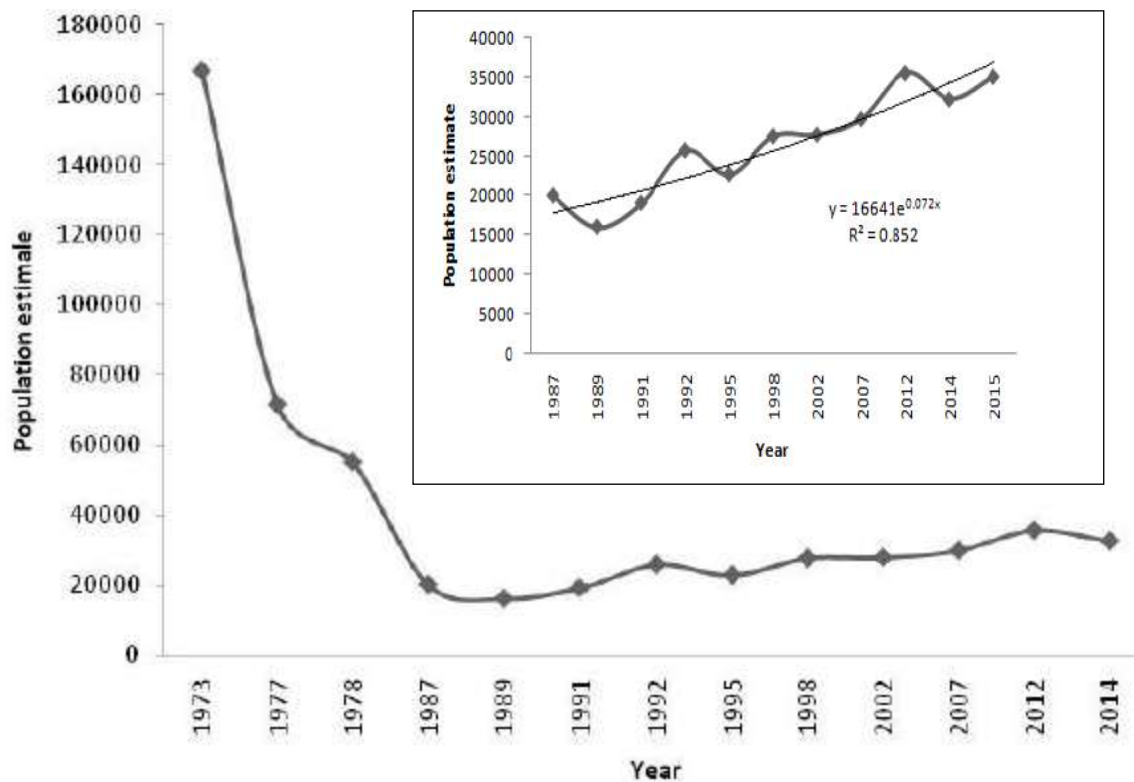


Figure 2: General trend of elephant population estimates

(KWS Report, 2015)

Areas traditionally known to have high elephant numbers showed a steady increase except the Mara ecosystem where high poaching has been reported (Figure 3). However, the sharp drop in 2014 could be explained by an abnormal high increase in elephant population in the Serengeti ecosystem (WWF, 2014).

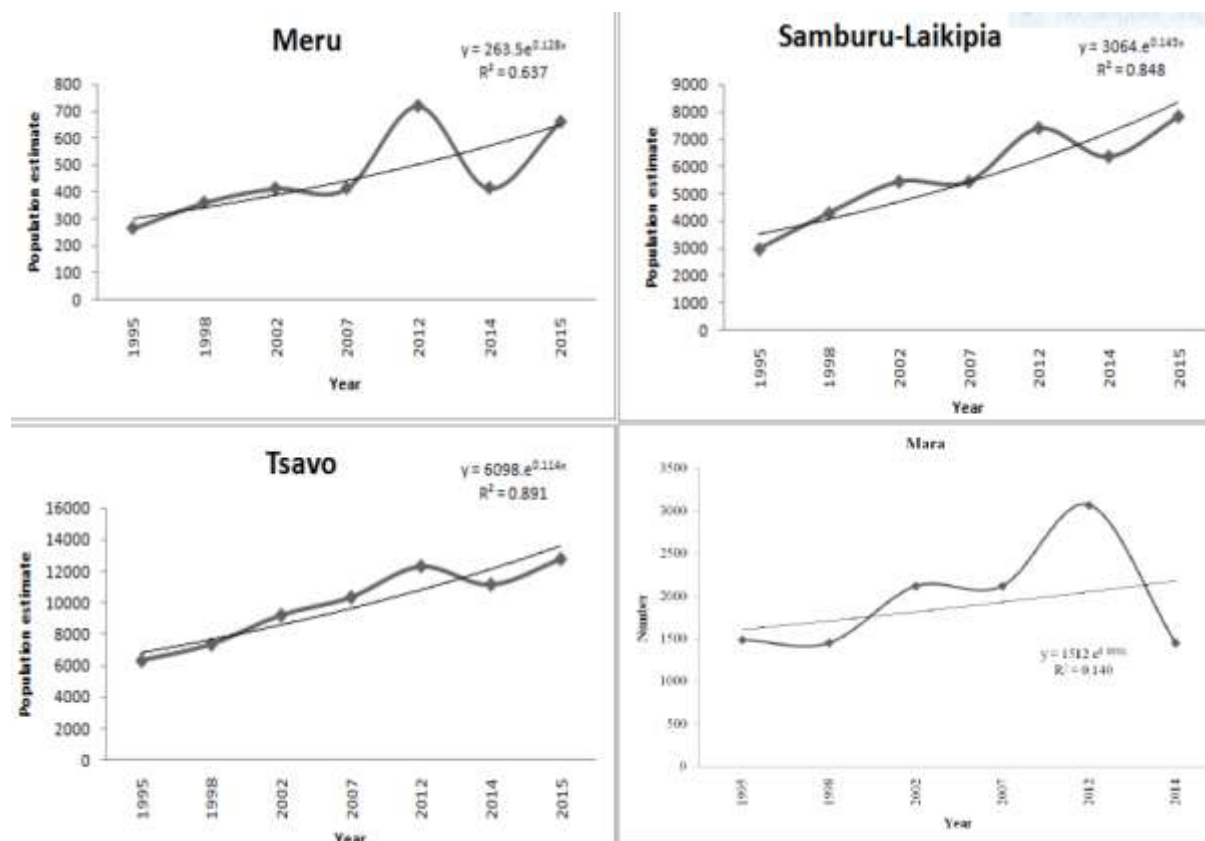


Figure 3: Elephant population trends in Meru, Samburu-Laikipia, and Tsavo and Mara ecosystems

Elephant poaching and illegal trade

Between 2012 and 2015, a total of 943 elephants have been poached in Kenya with 2012 recording high poaching of 384 incidences followed by 2013 with 302 and 164 and 93 cases in 2014 and 2015, respectively, a decline by 24%. According to the MIKE data, PIKE was over 50% between 2010 and 2014 and then dropped to about 40% in 2015 (Figure 4). Tsavo (0.43 ± 0.17 ; $n=1,322$ cases) and Mountain (0.45 ± 0.13 ; $n=1,896$ cases) conservation areas recorded low PIKE while Western (0.69 ± 0.14 ; $n=94$ cases) and Central rift (0.67 ± 0.14 ; $n=489$ cases) conservation areas had the highest PIKE. Generally, elephant mortality as a result of many diverse causes continues to be a big threat to their conservation and management. The drop in elephant mortality could be explained by enhanced security by both KWS rangers and community scouts, standardized monitoring across the range for reliable data and to avoid double counting,

increased and better HEC interventions, better wildlife legislation enacted in 2013 with stiff penalties, increased use of technology and cross border collaborations along the porous international borders.

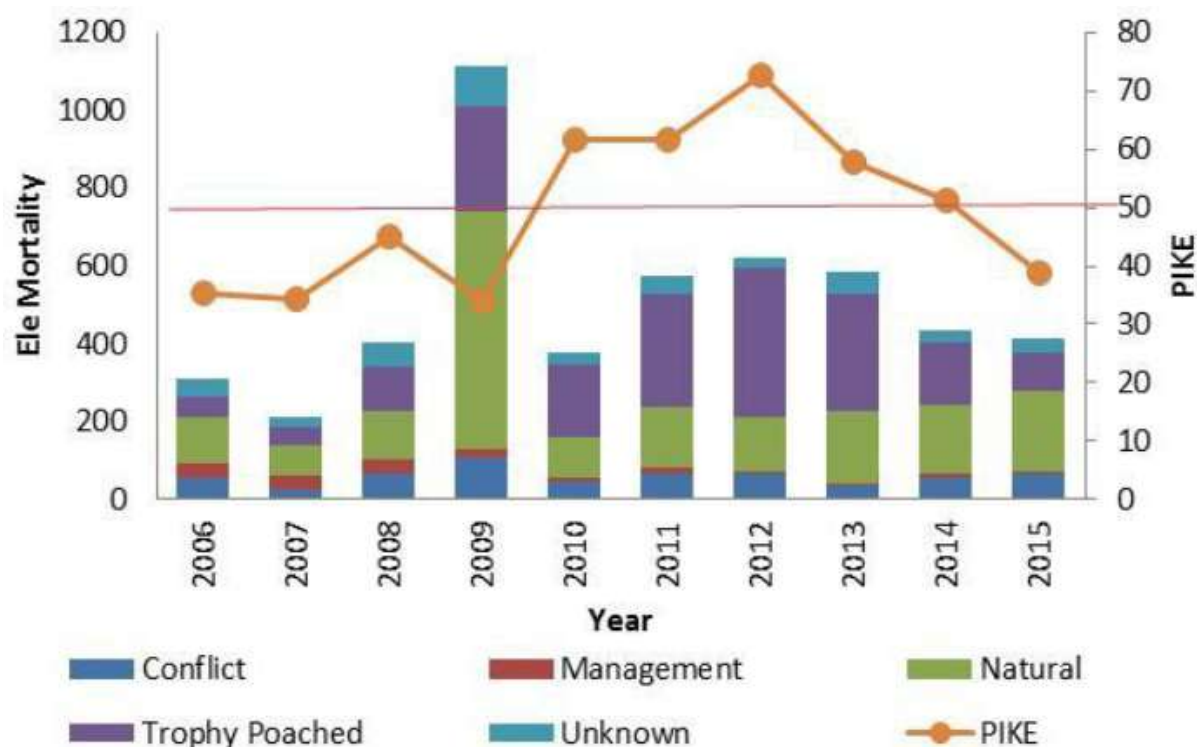


Figure 4: Monitoring of elephant mortality as a result of poaching, conflict, management, unknown and natural causes between 2006 and 2015.

Source: KWS (2015)

A recent report released by Wildlife Direct on the outcome of Court trials in the Implementation of the Wildlife Conservation and Management Act, 2013 between 2014 and 2015 shows that increased capacity and support into the judicial process has contributed to a significant decline in poaching (Gitari et al., 2016). The commitment of Kenya's government and the Kenyan people and the regional leaders to a zero tolerance approach towards poaching and ivory trafficking was shown by President Uhuru Kenyatta setting on fire 105 tones of Kenya's entire ivory stockpile in April 2016. This commitment has already borne fruit in the form of an 80% reduction in deaths of rhinos and elephants from poaching from 2012 to 2015 (Gitari et al., 2016). Enforcement

of the rule of law, above all in the law courts themselves, is key to Kenya's success in cracking down on wildlife crime.

A total of 1,430 suspects were arrested and prosecuted for various wildlife law offences in Kenya in 2014. While in both years the vast majority of those accused were Kenyan nationals, the number of non-Kenyan nationals charged in cases fell sharply from 21 in 2014 to 3 in 2015. The accused were charged under the WCMA 2013; the Forests Act (Act No. 7 of 2005), the Meat Control Act and the Prevention of Organized Crimes Act. Stiffer penalties were meted against including fines ranging between Ksh 20 million and Ksh 100 million unlike previously where people escaped with a fine of Ksh 40,000 which was easy to pay and continue with the practice.

The report makes the following useful and far reaching recommendations at various levels that will strengthen the judiciary process and hence, are useful for enriching this Strategy action (Gitari, 2016). They include:

(a) Policy and legislative reforms to target kingpins and to strengthen effectiveness of WCMA (2013) and to harmonize regional laws:

- (i). Ministry of Environment and Natural Resources to work with ODPP and other law enforcement agencies, experts and donor groups to formulate and fund national Strategy to combat transnational wildlife crime and set up an inter-agency transnational task force on wildlife crime investigations and prosecutions.
- (ii). Ministry of Environment to fast track a proposal to parliament to amend the WCMA to reflect current best practices in respect to floor vs. ceiling penalties and to operationalize Section 92. ODPP to conduct an evaluation of the need for amendments to other laws e.g. the Anti-Money Laundering Act.
- (iii). Ministry of Environment and Natural Resources to lobby East African parliaments to implement East African Legislative Assembly resolutions to harmonize laws and penalties in the region.

(b) Prosecution and law enforcement reforms to improve trial outcomes:

- (i). Government of Kenya to create a national investigative task force combining relevant law enforcement agencies and experts to target high-level traffickers and work closely with

international teams in the region to pursue targets across borders. A hotline and rewards programmes to be introduced.

- (ii). The ODPP to lead all investigations into major wildlife trafficking cases to ensure that SOP are followed and guidelines of the Rapid Reference Guide applied so that all evidence gathered in the investigations is admissible in court and has probative value.
 - (iii). ODPP to apply additional legislation such as the Proceeds of Crime and Anti-Money Laundering Act as well as the Prevention of Organized Crime Act in proceedings against dealers and traffickers.
 - (iv). ODPP anti-corruption team to initiate and lead investigations of corruption within the police and judicial system.
 - (v). The Inspector General of Police to elevate the classification of wildlife crimes to 'serious crimes' within the principal register of CID in order to trigger fingerprint recording for all wildlife crime suspects including foreign travelers arrested in Kenyan airports.
 - (vi). ODPP to train relevant police prosecutors who are handling wildlife trials.
 - (vii). Standard Operating Procedures to be developed to guide both the National Police Service and KWS to ensure that they work as one team with good working relations when arresting offenders, and in the handling/storage/custody of evidence. This will help avoid conflicts where overlapping mandate exist.
 - (viii). ODPP and Inspector General to work together to ensure that incompetence within the police force and prosecution of such crimes is addressed directly and, if necessary, with appropriate sanctions.
- (c) Judicial reforms to improve monitoring and deterrent sentencing:
- (i). The Judiciary through the Office of the Chief Justice to create a publicly available offenders list and link all foreign nationals arrested in respect or convicted of wildlife crime to the national 'no-flier' list and circulate the same to all airlines operating in the country.
 - (ii). The Office of the Chief Registrar of the Judiciary to create a separate register for wildlife crime in the court registry system to make it easier to access these cases and minimize the rate of files getting lost.
 - (iii). Chief Justice to digitize court files in order to identify repeat offenders and to improve case file management.

- (iv). Chief Justice to share the information from digitized court files with other relevant agencies in the region.
- (v). Chief Justice to give practice direction on sentencing specific to wildlife crime to ensure that sentences meted out are commensurate with the gravity of the offence and are consistent nationwide. This will require buy-in from the High Court to ensure that appeal decisions uphold, rather than undermine, efforts in this arena.
- (d) National and international outreach to create awareness and improve efficiency through cooperation:
 - (i). KWS to utilize existing citizen participation structures within the judiciary such as the Court Users Committees to create awareness among the general public on wildlife conservation and wildlife crime reporting.
 - (ii). KWS to meet regularly with NGOs and donor groups in order to improve understanding of each group's activities, coordinate their efforts, and make effective use of resources to improve enforcement efforts on the ground.
 - (iii). The Ministry of Environment and KWS to work with NGOs to conduct major awareness and outreach campaigns targeting visitors to Kenya at all borders, ports and international airports. The campaigns should inform visitors about the new legislation and its implications, in order to reduce demand for illegal wildlife products and attract whistleblowers.
 - (iv). KWS to strengthen relations with effective law enforcement entities in neighboring countries to address cross border incursions.
 - (v). The Ministry of Foreign Affairs to initiate dialogue with source, transit and demand countries to cooperation investigations, and to support convictions.
 - (vi). The Ministry of Devolution and Planning to work with NGOs and County governments and the local media to create public awareness about the new law and its implications

A monitoring framework needs to be developed to monitor the implementation of these recommendations. Conservation organizations should coordinate their efforts to avoid duplication of efforts and waste of resources. There is need for strengthening patrols, intelligence, detection, ranger capacity including increased equipment and ranger force for effective protection of wildlife and their natural resources. More emphasis should be put in areas that have limited NGO presence and support such as Kerio Valley,

Turkana, Baringo, Tana River, Tsavo among others where no tangible data as per the Strategy exist.

Strategic Objective 2: Maintain and expand elephant distribution and numbers in suitable habitat where appropriate.

Elephant range and connectivity loss

Loss of elephant range, habitat and hence connectivity due to anthropogenic activities was ranked as the main threat to the future elephant conservation efforts in Kenya by Area Management Committees (see Table 1). By 2015, most of the areas where the elephant population was wiped out due to poaching are now elephant dispersal areas after recolonization. However some critical habitats and ranges have completely been lost (Figure 5). The survival of elephants depends on dispersing widely and accessing critical resources. The shrinking range and loss of connectivity is blamed on human population explosion, lack of land use policy, lack of land use plans, changing land tenure from communal ownership to individual holdings, increased infrastructural development among other causes. Some of these activities are happening without undertaking an Environmental Impact Assessment (EIA) as required by law hence compromising on biodiversity and increasing human-elephant conflicts.

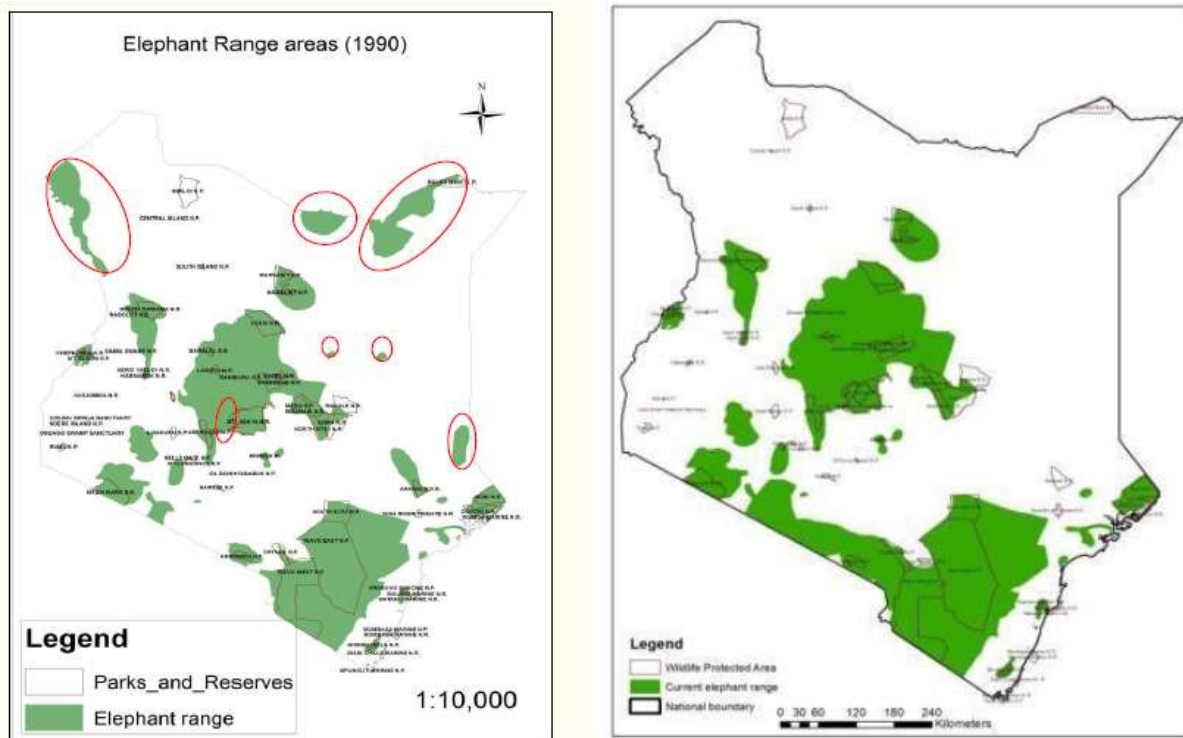


Figure 5: Comparison of elephant areas between 1990 and 2015 Source: KWS Report (2015)

Apart from the strategies proposed in the NES on securing the range and habitat for elephants, the following are additional **recommendations** for action from this review:

- ✚ Review and finalize the wildlife corridors report for adoption and gazettelement by the Ministry of Environment and Natural Resources
- ✚ With relevant stakeholders, develop area-based detailed corridor strategies to secure the corridors
- ✚ Participate and input into the development of the county spatial plans
- ✚ Lobby county governments with elephants to enact laws that are conservation friendly

Strategic Objective 3: Strengthen Monitoring Systems for adaptive management and protection of elephants

Over 70% of the proposed studies in the Strategy were not undertaken which is critical for informed decision making. This is explained majorly by lack of funds to undertake

research while most conservation NGOs are not research oriented. The KWS scientists should be allowed to source for research grants independently and also lobby the government to allocate some funds towards research. Conservation organizations should be encouraged to place a bigger emphasis on the research for decision making at action level and for supporting policy review and hence budget for it and work with KWS scientists in case of lack of capacity.

Strategic Objective 4: Enhance HEC mitigation by involving stakeholders at all levels in the use of appropriate site – specific methods

Agricultural development is the main cause of human-elephant conflict and the main competitor with conservation. Agriculture sector in Kenya is the fundamental part of the economy contributing 25% of the total Gross Domestic Product (GDP), and another 27% indirectly. The sector employs over 40% of the total population and over 70% of the rural people. This sector is large and complex, with a multitude of public, parastatal, non-governmental and private actors, accounts for 65% of the export earnings and provides livelihood (employment, income, and food security needs) for more than 80% of the Kenyan population.

The Elephant is regarded as the most problem animal with high incidences of conflicts compared to other wildlife species (Figure 6). These national figures on conflict incidences by elephants are still very low due to poor data collection and reporting. For instance in the Amboseli ecosystem alone, over 600 elephant related conflict cases are reported annually (AWF, 2015). The same to the Mara ecosystem where over 1,000 elephant conflict incidences are recorded (WWF, 2012). Human-elephant conflict has emerged as the main cause of elephant mortality in areas where poaching has been controlled. In Amboseli for instance, HEC contributes about 64% of elephant mortality. In order to adequately mitigate HEC, there is need for area – specific HEC mitigation strategies since some approaches may vary from one area to another. To this end, it is only the Mountain Region and the Amboseli ecosystem that have detailed strategies as recommended in the elephant Strategy. There is need for increased donor support to address this threat since the number of elephants being killed or injured is worse than

poaching. There is need for proper data collection to document the impact of conflict on elephants and on the people which again requires increased boots on the ground. However, community scouts could be used to collect data and share at the national level.

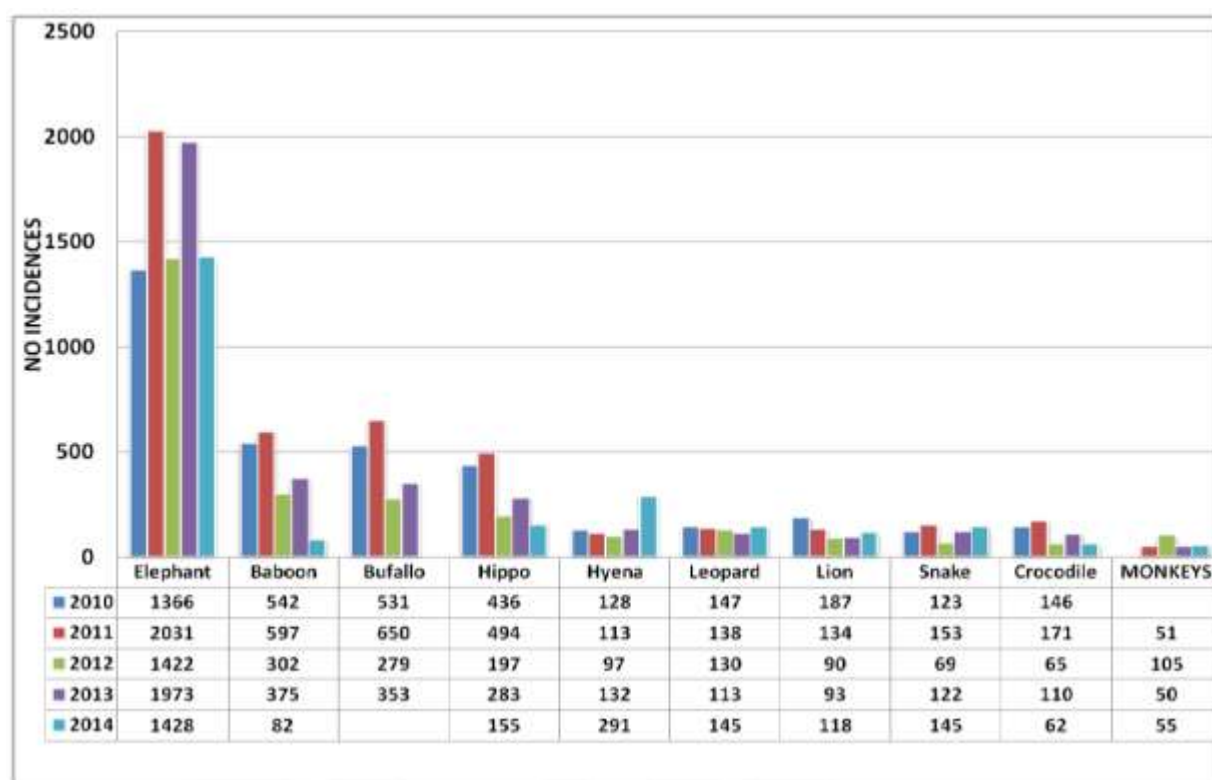


Figure 6: Human-wildlife conflicts in Kenya between 2010 and 2014 by different wildlife species

Source: KWS (2015).

Strategic Objective 5: Provide benefits that will encourage landowners and local communities to tolerate protect and accommodate elephants

Wildlife based tourism is one of the most important social-economic sectors in Kenya and contributes about 10% of the Gross Domestic Product (GDP) and employs about 9% of the total wage workforce in the country. The sector has high multiplier effects as its growth stimulates further development in other sectors of the economy. However, it is not given much attention by the government despite Ksh 90 billion earnings to the country. The Kenya Vision 2030 recognizes the importance of the sector as one of the

main pillars to the national economy. Tourism development, if well developed, is considered as one strategy of mitigating conflict through benefit sharing with local communities living with elephants. However equitable sharing of benefits among local communities remain a challenge. Low income from tourism as a result of low tourism due to insecurity from terrorism threats and travel advisories by the main tourist source countries, political unrest in the country, Ebola outbreak and competing land uses complicates the already established systems of benefit sharing and management of natural resources.

However, as a result of the potential benefits from tourism to the communities that live adjacent to protected areas and provide over 60% of the elephant dispersal areas have set aside their land for conservation as community conservancies. According to KWCA strategic plan, over 120 community conservancies have been established for conservation purpose (KWCA, 2015).

The benefits that have been articulated in the Strategy have not been fully exploited. These include the REDD+ and carbon project to conserve the forests while deriving benefits from carbon credit. This would benefit communities living around the forests with elephants such as Mt Kenya, Mt Elgon, Aberdares, Mt Marsabit, Arabuko Sokoke, Boni Dondori, Mau forest, among other forests. The county governments should support communities willing to set aside their land for conservation both financially and technically. Other benefits include tourism, genetic plant resources, nature-based enterprises such as bee keeping. Payment for Ecosystem Services (PES) through the land lease program has been tried in the Mara and Amboseli ecosystems but sustainability remains a challenge since they are highly donor dependent or on the fragile tourism industry.

Strategic Objective 6: Sustain an effective resource capacity through collaborative efforts among stakeholders with a strategic focus on priority areas

Successful elephant conservation and management requires a well-developed and equipped human capacity. Among all the wildlife species, the elephant is regarded as the most sensitive and highly protected species which then calls for increased

budgetary allocation by the government. Thanks to the conservation NGOs that are partnering with KWS to support elephant conservation initiatives. KWS has over the last four years been recruiting 500 rangers every year and have so far recruited and trained over 2,000 rangers (KWS, 2015).

The Wildlife Act 2013 recognizes for the first time the community conservancies and community rangers which has boosted the development of the conservancies and scouts movement in the country. In order to ensure organized establishment and management of the conservancies and scouts, a Kenya Wildlife Conservancies Association (KWCA) was established in 2014. Hence, KWCA works with landowners and communities to sustainably conserve and manage wildlife and their habitat outside formal protected areas for the benefit of the people of Kenya. So far 177 community conservancies have registered with KWCA with 2,257 scouts and hence securing 6,228,096 ha of land (which is about 10.71% of Kenya's landmass) and benefiting 694,823 community members (King et al., 2015). For instance, In Amboseli ecosystem, over 350 community scouts and rangers have been recruited and trained informally or formerly through KWS training college beside the 95 rangers in the Amboseli / Tsavo West ecosystem. Other KWS regions, especially those with conservation NGOs and established tourism business, have also recruited community scouts to provide security to wildlife outside protected areas. These include Masai Mara, Laikipia / Samburu, Baringo, and newly established conservation areas in Tana River Delta.

Strategic Objective 7: Implement an effective coordination framework to support stakeholders and enhance decision-making action

There was a general response by all the eight regions that there is generally poor coordination in the implementation of the Strategy. The elephant coordination office is little known in the conservation areas and has limited authority and poorly executed mandate. Hence, there has been no follow up with the respective conservation areas in respect to the implementation of the Strategy. That also explains why most practitioners have never seen nor read the Strategy. There is need to popularize the elephant program office among all the stakeholders and elephant practitioners and be accorded

the authority to implement the Strategy. This will improve the coordination of implementation of the Strategy and ensure proper documentation of the implementation status for easy reporting and generation of yearly reports.

As such, only three areas namely Western CA, Tsavo CA and Central Rift CA have Area Management Committees in place and only TCA that has held only one meeting. Lack of funds for meetings was the main challenge but the formation of the committees does not require funds.

Ranking of implementation of the Strategy

The implementation status of the Strategy is on track despite the many challenges including limited financial support as seen in the table 3 below. However, there is still a lot of work to be done especially to secure the unprecedented dwindling of elephant range and habitat loss and fragmentation, loss of corridors and connectivity which is the contemporary biggest threat to the elephant population caused by increasing human population and activities. A detailed implementation status of each Action in the Strategy is as shown in the monitoring framework (**Annex 5**).

Table 3: Implementation status of the Strategy based on Actions

Implementation status	% of implementation status of Actions
Completed	5.1
On track	59.5
Slow progress	10.8
Off track / not started	24.0
Not ranked	0.6

Challenges of implementation of the Strategy

The implementation of the elephant Strategy faces an uphill task with numerous challenges as outlined below.

- (a) The Strategy has no budget hence no funds are allocated specifically for the implementation of the Strategy resulting to many activities not being undertaken apart from the low funding that is sent out to the parks and reserves which again is shared for general wildlife management issues.
- (b) Lack of most baseline data which is essential for measuring the progress before, during and after the expiry period of the Strategy. This should have been undertaken as the first activity after the launch of the Strategy in 2012 since it was not incorporated into the Strategy.
- (c) Frequent transfers of personnel on the ground as required by KWS policy results in lack of continuity in data collection and data base maintenance making reporting on quantitative information very difficult.
- (d) Lack of a substantive elephant program coordinator to coordinate the implementation of the Strategy.
- (e) The Area Management Committees cannot hold meetings for elephants alone since there are other species strategies being implemented and overseen by the same committee. Hence bringing partners to many meetings is tricky and expensive. It was proposed that combined meetings for all species strategies will be more useful.
- (f) Low human resource capacity in the elephant program to coordinate and monitor the implementation of the many actions outlined in the Strategy across the eight regions.
- (g) Inequality in the presence of conservation NGOs' in the elephant range leaving populations in such ranges as forgotten with little known information about them. These include western CA, Eastern CA, Northern CA and Coast CA compared to overcrowded areas like Masai Mara, Laikipia / Samburu and Amboseli.
- (h) When the National Elephant Strategy was launched in 2012, a new constitution for Kenya had been enacted in 2010 which created a devolved governance system of 47 county governments and a national government. This called for devolution of most functions from the central government to the county governments which has had its fair

share of some teething problems. The new constitution meant that all national laws and policies be reviewed and realigned with the constitution while relevant laws were to be enacted to support the devolution process. Some of these sectoral policies and legal frameworks have a direct or indirect implication on elephant conservation and management and were not captured in the national elephant conservation and management Strategy, 2012 - 2021. These include:

- Wildlife Conservation and Management Act, 2014
 - Wildlife Conservation National Parks Regulations, 2013
 - County Government Act, 2012
 - Land Act, 2012
 - Land Registration Act, 2012
 - Tourism, Act 2011
 - Environmental Management and Co-ordination (Amendment) Act (No 5 of 2015)
 - Environment and Land Court Act, 2011
 - Climate Change Act, 2016
 - Mining Act, 2016
 - Ethics and Anti-Corruption Commission (Amendment) Act, 2015
 - Firearms Act, 2012
 - Agriculture, Fisheries and Food Authority Act, 2013
 - Proceeds of Crime and Anti-Money Laundering Act, 2012, and for connected purposes
 - Forest Act, 2005
 - Forest Policy, 2014
 - Water Act, 2014
 - National Land Commission Act, No 5 of 2012
 - East African Community One Stop Border Posts Bill, 2012
 - Community Land Bill, 2015
- (i) New institutions / organizations that are relevant to elephant conservation were established after the launch of the Strategy that should be considered in the review

process since they are key to the successful implementation of the Strategy. These include:

- (ii) County Governments which are devolved units of governance from the national government have elephant presence in 32 (68%) out of 47 counties (Table 3). They are mandated to develop County Integrated Development Plans and County Spatial Plans among other plans as well as county by-laws and policies. These new initiatives must fit into the national elephant Strategy in order to secure the range and habitat for elephants and other wildlife as a national heritage. The County laws and policies must also be aligned with the national laws and policies.

None of the County officials interviewed (n=18) are aware about the national elephant Strategy. As a result, they have no plans in place to support elephant conservation and management in your county. However, some counties with Game Reserves and National Reserves like Narok, Keyio Marakwet, Kitui etc have put resources towards conservation unlike the counties that have national parks that are managed by KWS. Such counties have been pushing for change of ownership of the parks from KWS in order to benefit from tourism earnings. Through spatial planning and enactment of by-laws that are conservation friendly, the county government are crucial in securing the critical elephant habitats, dispersal areas and corridors in their respective counties. KWS and conservation NGOs have been appointed to sit on the spatial planning committees to provide technical advice on conservation issues in their respective counties. None of the county is yet to enact county by-laws that will be instrumental in elephant conservation.

Table 4: Counties in Kenya with elephant presence in green and red without elephants

County	Range	County	Range
Baringo County		Bomet County	
Bungoma County		Busia County	
Elgeyo Marakwet County		Embu County	

County	Range	County	Range
Garissa County		Homa Bay County	
Isiolo County		Kajiado County	
Kakamega County		Kericho County	
Kiambu County		Kilifi County	
Kirinyaga County		Kisii County	
Kisumu County		Kitui County	
Kwale County		Laikipia County	
Lamu County		Machakos County	
Makueni County		Mandera County	
Meru County		Migori County	
Marsabit County		Mombasa County	
Murang'a County		Nairobi County	
Nakuru County		Nandi County	
Narok County		Nyamira County	
Nyandarua County		Nyeri County	
Samburu County		Siaya County	
Taita Taveta County		Tana River County	
Tharaka Nithi County		Trans Nzoia County	
Turkana County		Uasin Gishu County	
Vihiga County		Wajir County	
West Pokot County			

(iii) County Wildlife Compensation Committee (CWCC) which is mandated by the Ministry of Environment and Natural Resources to oversee the compensation of the costs of human-wildlife conflicts as stipulated in the Wildlife Act 2014. Human-elephant conflict is one of the main threats to elephant conservation and management and compensation is one of the strategies recommended for mitigating conflict.

None of the CWCC members interviewed (n=21) are aware about the national elephant Strategy. This then makes it difficult for this crucial committee to implement the Strategy. The establishment of the committee has taken rather long and they are yet to start functioning properly even after two years of enactment of the revised wildlife conservation Act. This is blamed on low budgetary allocation by the government which has left all crop raiding and livestock predation claims uncompensated. The government is finding it rather difficult to compensate for these claims due to related high costs and the focus is on human deaths and injuries which is more emotive and often results to revenge killings of wildlife. According to experts, no compensation has ever worked and it is not a solution to human-wildlife conflicts. There is need therefore to carefully look at this clause and identify other more sustainable strategies that could be employed. The CWCC should work with the respective counties to develop strategies that will mitigate conflicts. This can only work best if the central government increases the budgetary allocation and releases the funds timely.

- (iv) Kenya Wildlife Conservancies Association (KWCA), an association put together by conservation organization in 2012 to oversee the establishment and better functioning of community conservancies in Kenya (KWCA, 2014). The KWCA has come with an inventory of all the community conservancies in the country and developed guidelines to guide their operations (King et al., 2015).
- (v) The National Land Commission (NLC) mandate is drawn from the National Land Policy of 2009, Constitution of Kenya 2010, National Land Commission Act, 2012, the Land Act 2012 and the Land Registration Act of 2012. The functions of the Commission include to: manage public land on behalf of the national and county governments; to recommend a national land policy to the national government; advise the national government on a comprehensive programme for the registration of title in land throughout Kenya; conduct research related to land and the use of natural resources, and make recommendations to appropriate authorities; initiate investigations, on its own initiative .or on a complaint, into present or historical land injustices, and recommend

appropriate redress; encourage the application of traditional dispute resolution mechanisms in land conflicts; assess tax on land and premiums on immovable property in any area designated by law; and, monitor and have oversight responsibilities over land use planning throughout the country. These functions are critical to elephant conservation and management and hence working closely with the NLC is important in addressing some of the threats facing the elephants.

Under the Land Act, 2012, the Commission is mandated to manage the Land Compensation Fund and also identify ecologically sensitive areas that are within public land and demarcate and take any other justified action on those areas and act to prevent environmental degradation and climate change. The Commission has a big say on, for example, securing elephant corridors, protection of parks, forests and reserves from land grabbers, among other roles. However, there has been little engagement between KWS and the NLC to secure critical wildlife areas.

- (vi) Increasing government investment in infrastructural development and mining through Kenya-China partnership initiative and most of these developments are quite recent and are happening and or planned to be undertaken in areas that are within the elephant range. Some of the key projects that will affect elephant conservation and management with some already showing the effect include:
- (a) Standard Gauge Railway (SGR) from Mombasa to Nairobi that has split Tsavo East and West National Parks into two which can be referred to as 'The Berlin Wall' and interfered with elephant movement. The under passes created for wildlife movement are yet to be used by wildlife.
 - (b) Oil pipeline also from Mombasa to Nairobi
 - (c) The planned water pipeline
 - (d) Oil and gas discovery and exploration in northern Kenya
 - (e) Mining exploration e.g. Cement in Amboseli, In Tsavo ecosystem which has the largest elephant population in Kenya, gemstones industry remains dominant, with most mining fields being run by small scale mining groups. Some of the gemstones found in the area

include Tsavorite, red garnets, green garnets, ruby blue sapphire, kyanites and green tourmalines. Tsavorite and Ruby are highly sought after in the international markets. Taita Taveta is the main source of these valuable minerals in the world and with devolution, Taita Taveta County government is investing heavily into compressors and tools to help the small scale miners automate some of their operations and grow into large scale mining.

- (f) The Lamu port and the LAPSSET Corridor project that will connect Lamu port with Southern Sudan and Ethiopia. The LAPSSET Corridor infrastructure is being developed as a critical enabler meant to spur growth of other sectors of the economy within the Corridor which will pass through a less developed and undisturbed elephant range. The proposed mega infrastructure project will definitely fragment the elephant habitat and range which will affect their movement patterns. Already, the rich agricultural value chain spanning over ten different economic crops whose implementation has begun with the establishment of mega irrigation schemes. The infrastructure components comprises of key Transport, Energy and Communication investments which include;
- Lamu Port at Manda Bay (32 Berths including Associated Infrastructure);
 - Standard Gauge Railway Line (1,710 km) from Lamu – Isiolo - South Sudan (Juba) – Ethiopia (Addis Ababa);
 - Highways (880 km) from Lamu – Isiolo - South Sudan (Juba) – Ethiopia (Addis Ababa);
 - Crude Oil Pipeline (2,240 km) from Lamu – Isiolo – Nakodok/Nadapal (South Sudan), and Product Oil Pipeline from Isiolo – Moyale – Addis Ababa (Ethiopia);
 - International Airports at Lamu, Isiolo, and Lokichokio;
 - Resort Cities at Lamu, Isiolo and Lake Turkana;
 - Merchant Oil Refinery at Isiolo; and,
 - Services related infrastructure project components namely; (a). Malindi – Garsen Road; (b). High Grand Falls Multipurpose Dam for water and power supply that is envisaged to produce 500MW of power and provide water to Lamu city, Lamu Port and metropolis and irrigation of mega farms planned for the Tana Delta among other areas within the Corridor; (c). Fibre Optic Cable / Communication;

and, (d). Other generated and attracted investments in commercial and manufacturing sectors along the LAPSSET Corridor.

- (g) Agricultural expansion in some of the elephant ranges such as the 10,000 acres of maize in the Tana Delta is planned to expand to 100,000 acres. This is happening right in the elephant migratory corridor between Tsavo and Lamu.
- (h) Forest excision by government to settle the land less squatters even with a forest cover being less than the recommended international size of 10% of the surface. About 17,000 acres of Mau forest which is hosts one of the remnant forest population is earmarked for excision again. The already reduced size of the forest brings people and elephants into direct conflict and the elephants are no longer able to disperse to the Masai Mara due to human settlement and farming which have isolated the forest.
- (i) Finally, this Strategy was developed during the Kenya Wildlife Service Strategic Plan 2008 – 2012. However, the new strategic plan 2012 – 2017 should have considered the elephant Strategy for resource mobilization due increasing threats to safe the elephants from extinction. The Strategy has three themes with a desired outcome or strategic result. The KWS, in the duration of this strategic plan, will focus on three areas namely (a) conservation stewardship, which is KWS core mandate; (b) people excellence, which aims at having the right people with the right attitude and capacity; and, (c) collaborative partnerships since wildlife management can only be achieved with the support of other stakeholders. Unlike the two previous strategic plans which were the building blocks to support KWS growth, this Strategy has put emphasis on conservation. As a result, expected are increased conservation efforts after having put the supporting blocks in place. The 2008-2012 strategic plan focus was on people as KWS most valuable resource, image for strengthening the KWS brand and leveraging on technology for opening new opportunities. Strategic plan 2005-2010 focused on use of science and information to drive park management activities, and ensuring market presence to generate revenue to support conservation. All these approaches are critical to elephant conservation but their achievements have been mixed. The strengths and opportunities exist but they have not been fully utilized to achieve the intended goal.

The trans-boundary population (Tanzania, Uganda, Sudan)

An interview was only conducted with TANAPA (3), TAWIRI (2) and KDU (1) conservation institutions from Tanzania. Efforts to get respondents from Uganda and Southern Sudan were not successful. All the respondents have never seen the elephant Strategy but they are somehow involved, though informally, in the implementation of some of the Trans boundary actions outlined in the Conservation and Management Strategy for the Elephant in Kenya (2012-2021). This is happening because of the coordination and support of conservation NGOs that have cross border programs. Because of collaboration in joint patrols and information sharing and regular meetings, the porous border of Kenya – Tanzania has been secured and very low poaching levels have been reported since 2012. This unique partnership between the local communities and the wildlife agencies has ensured increased wildlife security. However, this needs to be formalized and laws on poaching and illegal wildlife trade harmonized for a greater impact.

D. Overall Lessons Learned

Some of the lessons learned regarding what has worked, what hasn't work and why are outlined below.

- Sustained anti-poaching and illegal wildlife trade efforts realized low poaching incidences in the country. This was as a result of increased human and financial resources from the government, conservation NGOs and other donors and political good will from the government.
- Education and awareness among the citizens is critical for understanding the government policies and legal framework as well as general understanding of elephant conservation and management issues to win their support
- Lack of good coordination of the implementation of the Strategy due to limited human resources and inadequate funds resulted to various actions not being implemented.
- Conservation NGOs are crucial for the implementation of the elephant Strategy since the budgetary allocation by the government is not sufficient. Areas without NGOs have performed poorly in the implementation of the Strategy.

Some of the lessons learned with wider relevance that can be generalised beyond the current Strategy period include:

- Strong and sustained lobbying and advocacy is critical for realization of conservation goals. However, this must go in hand with political good will to ensure support for planned actions;
- Conservation must pay and be able to compete favorably with other land uses to secure wildlife outside protected areas and win support from communities who host over 60% of wildlife;
- The need to harmonize conflicting county and central government sectoral laws and policies and ensure total enforcement for future conservation efforts.
- Compensation for wildlife related crop damages by the government as outlined in the current wildlife Act 2013 is complicated, very costly and may not succeed as documented by IUCN AfESG.
- An integrated and holistic approach to elephant conservation is key due to the complex nature of the threats and many challenges. For instance, there are a lot resources and efforts towards anti-poaching and elephant protection and yet the elephant range and habitat is dwindling at an alarming rate including loss of connectivity due to human activities. As a result, many elephants are being killed due to arising conflicts.

E. Conclusions

The Elephant Conservation and Management Strategy for Kenya is implemented by diverse players including many KWS departments (Species, Research, Security, Community, Resource mobilization, Communication, Education, etc), Ministry of Environment and Natural Resources, the National Environment and Management Authority, Kenya Forest Service (KFS), Ministry of Tourism, Ministry of Finance, Judiciary, Immigration, Internal Security, conservation NGOs, Community-Based Organizations, County Governments (County Wildlife Compensation Committee (CWCC), National and Game Reserves), private sector etc.

Externally, the Strategy also considers support from the wildlife agencies and other practitioners working on trans-boundary conservation initiative including TANAPA,

Wildlife Division and TAWIRI from Tanzania; Uganda Wildlife Service (UWS) and Sudan, Ethiopia wildlife authorities. Other key organizations and institutions are EAC, African Elephant Specialist Group (AfESG), CITIES, AU among others.

Unfortunately over 90% of these key institutions and organizations have never seen the elephant Strategy and are not aware that they could be implementing actions as outlined in the Strategy. This is blamed on poor coordination of the implementation of the Strategy resulting from inadequate budgetary allocation by the Treasury. Also the once vibrant elephant program coordination office has been watered down and not given the necessary support.

Establishing the status of implementation of the Strategy, as a result, and relating to the impact is a daunting task considering poor record keeping by key practitioners. One reason why the effectiveness of conservation attention is particularly difficult to assess is that most information regarding elephant conservation is not published, or is not easily accessible while some organizations are only keen on the results and impact and not keeping proper data or records. In some situations where data are published, the significant time lag between data collection and publication can mean the situation for a species has already changed from that reported in a publication. The research department lacks financial support since the focus of elephant conservation shifted to anti-poaching and is not keen to publish work on elephants.

Practitioners and experts in elephant conservation, hence, are an untapped resource of up-to-date information and can often draw on their knowledge of published and unpublished data to give an opinion on expected future elephant conservation efforts and developments, something that cannot be achieved within the period allocated for the mid-term review of the Strategy considering the many and diverse stakeholders involved. However, there are uncertainties associated with expert elicitation that include but are not limited to (a) a tendency towards overconfidence in population estimates, (b) discrepancies with terminology used in the Strategy, (c) poorly stated indicators of success and their interpretation, (d) possession of key information but an inability to express it, indicating poor documentation and record keeping; (e) confirmation and

accessibility bias, in which answers are interpreted in the context of an expert's pre-existing beliefs or some pieces of information are more easily recalled than others.

Key recommendations

- ✓ Strengthen KWS elephant program office by appointing a substantive elephant program coordinator and additional support staff to assist in coordinating, monitoring of the implementation of the actions as outlined in the Strategy including resource mobilization.
- ✓ Mobilize financial resources to implement the elephant Strategy through proposal development and lobbying the national government for increased budgetary allocation to KWS and county government to national and game reserves and community conservancies.
- ✓ Lobby for support by county governments to enact county legislations that are geared towards conservation such as creation of conservation areas, rehabilitation of reserves and securing elephant corridors
- ✓ Review and enact the draft wildlife policy 2011 to guide the implementation of the Wildlife Conservation and Management Act 2013 including some of the actions within the elephant Strategy.
- ✓ Develop detailed threat based area management strategies such as HEC mitigation Strategy, Anti-poaching and illegal wildlife trade Strategy, securing wildlife corridors and dispersal areas corridor Strategy, Climate change Strategy, etc for effective wildlife management.
- ✓ Review some of the actions and indicators in the Strategy and replace outdated strategies or methods used in the elephant Strategy e.g. use of MIST, etc with new technologies e.g. Cyber tracker, SMART, WILD, Drones, Camera traps, forensic and DNA, etc, for purposes of easy reporting and evaluation in future and use of smart phones.
- ✓ Coordinated development of KWS departmental annual work plans to properly and systematically implement the elephant Strategy for easy monitoring and delivery and harmonize cases with cross cutting actions and or targets.

- ✓ Develop strategies to increased benefits to communities living with elephants and to make conservation a competitive land use option – e.g. REDD+ in areas with forests such as Aberdares, Mt Kenya, Mt Elgon, Chyulu Hills, etc and tourism development.
- ✓ Revamp and support the functioning of the four elephant committees (EEC, ETC, EMC, EAC) to actively engage in the elephant Strategy implementation process and timely address arising challenges including constituting the committees.
- ✓ Due to the complexity of the program with many actions supported by different KWS departments and many practitioners and stakeholders (NGOs, development partners, sectoral government departments, Central and County governments, entrepreneurs, etc, establish an M&E desk in the eight regions for easy tracking of implementation and prompt informed action. The information will then feed into the national elephant M&E coordination office for easy generation of annual reports for sharing and action. This will take care of data gaps as a result of frequent staff transfers.
- ✓ Harmonize conflicting central and county government sectoral laws and policies and enact new laws and policies that will ensure total enforcement for future elephant conservation efforts.
- ✓ Set up high level inter-ministerial tasks force from relevant ministries and departments whose policies and activities may influence elephant conservation and management to ensure harmonization of policies and activities.
- ✓ Engage with development partners on planned projects that may affect elephant conservation for joint planning. This include Standard Gauge Railway, Oil pipeline, water pipeline, Oil and Gas exploration, large scale farming in the Tana delta, etc
- ✓ Review and finalize the national status report on wildlife corridors for gazettment by the Ministry of Environment and Natural Resources
- ✓ Develop ecosystem management plans for gazettment by the Ministry of Environment and Natural Resources and only if they will have a positive impact on conservation of natural resources.
- ✓ Provide technical support into the county spatial plan development process in all counties within the elephant range
- ✓ Revive and strengthen the County Environmental Committee (CEC) (formerly District Environmental Committee (DEC)).

- ✓ Actively engage county governments to support conservation initiatives in their respective counties.

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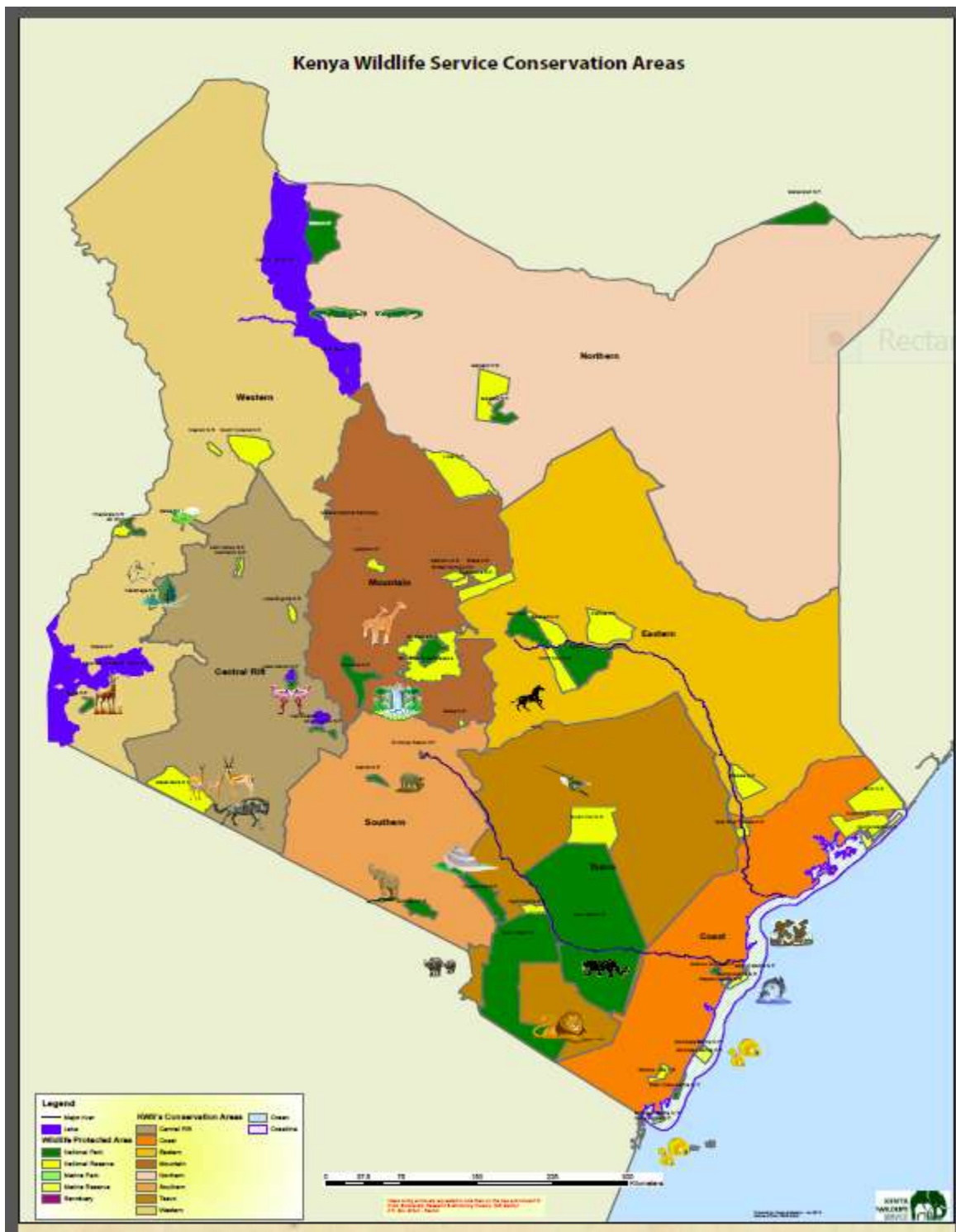
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ANNEXES

Annex 1: Map of Kenya showing conservation areas



Annex 2: Progress of implementation of the elephant Strategy per target and action based on subjective analysis

Target 1.1: *Proportion of illegal killed elephants per annu reduced to less than 1%*

Action	Rank	Achievements	Remarks
Conduct assessment of security effectiveness and needs in elephant distribution range.		Assessment report produced and circulated to decision making framework	Needs assessment and effectiveness is usually undertaken by KWS yearly and support provided in ateas of need. NGOs and private sector also do the same for the sake of value for money
Recruit, train and equip community, KWS, county council and private sector security staff to adequate levels.		Trained 35 Meru county rangers in Manyani & deployed to Nyambene NR Over 1,200 KWS rangers recruited, trained& deployed Over 230 community rangerstrained at Manyani LEA Over 124vehicless procured for the security team Night vision googles, GPS, Cameras, clothing, binoculars, modern weaponry provided Tactical medical (First	Due to poor record keeping it was not easy to get the exact numbers. The private sector and other conservation organisationsare also many and it was not easy to get information from all. Generally good progress was made towards this action.

Action	Rank	Achievements	Remarks
		Aid), patrols, BATTUK progressive courses undertaken	
Increase patrolling intensity in elephant distribution range including aerial patrols to required levels		No. of patrol bases increased by 33% Daily aerial recce undertaken 80% patrol coverage 60% increase in patrol	Despite the huge area coverage, this has been undertaken by increased number of KWS ranger and community scouts. Vehicles were also sent to the field to ensure high presence.
Widened intelligence networks through recruitment and maintenance of new informants.		90% compliance to timely dissemination of actionable Intelligence reports. reduction in elephant poaching between 2012- 2015	Although this information is kept as a secret, over 1,000 informers across the wildlife range provide critical information to KWS and NGOs
Introduce intelligence informer networks in potential risk areas where they do not exist.		Over 80 elephant trackers from the local communities employed to boost intelligence & monitor elephant movements. New intelligence cell opened e.g. Asako & Bangale in ECA	The war on poaching is being won partly because of the informer network. However, some donors are not keen to support the informer network.
Enhance intelligence networks to specific areas		Weekly, Monthly, quarterly, reports produced	These reports are crucial since they are used to measure the

Action	Rank	Achievements	Remarks
		General increase in arrests & successful convictions	performance of the security agents and designing strategies to enhance their security operations.
Deploy strategic units in security hotspots		Crack units deployed in Kinna, Rapsu, Duse, Korbessa hotspot areas & Rombob between 2013-2014	was undertaken once hot spot areas are identified
Lobby for an increase in proportion of game scouts with Kenya Police Reserve (KPR) status to enhance powers and legal status.		35 Nyambene game scouts incorporated into KPR; 15 scouts in Amboseli as wardens	This process has begun but the challenge is in northern Kenya due to insecurity & the government is hesitant to arm the community rangers as KPR but honorary warden is another option
Proactively deploy patrols in all elephant conservation areas through consistently collecting accurate information on patrol movements, poaching/illegal signs and sightings of threatened species; analysing and updating operational maps.		Patrols are deployed according to movements & distribution of elephants & intelligence reports	It is the order of the day and data from MIST forms is evidence although the MIST program is not working in many places due to sabotage by rangers for fear of their close monitoring. Digital radios are being

Action	Rank	Achievements	Remarks
			rolled out that will show patrol areas.
Use satellite radio tracking of vulnerable elephant populations for security back up		12 elephants collared ECA 5 elephants collared 14 elephants collared	The collars have been used to designate elephant corridors and to mitigate conflicts
Continue collecting data on ivory trade to help control illegal trade and to support the ivory trade ban		Continuous data collected & analysed & disseminated by the intelligence team	Good records are kept on ivory trade
Strengthen country exit and entry points through training in searching and detecting		17 trained custom and ports officials 12 sniffer dogs trained and deployed at the airports	Sniffer dogs have smoked out illegal wildlife trophies at the airports mainly by Chinese nationalities

Target 1.2: Strengthened legislation and enforcement

Action	Rank	Achievement	Remarks
Review existing national Wildlife Act and recommend/lobby changes for substantial minimum penalties for the illegal hunting of elephants and the illegal possession of, or trade in elephant products		Wildlife Act revised and enacted in 2013 with stiffer penalties (fine of Ksh 20 million or 7 years imprisonment)	The new wildlife Act 2013 came into force in 2014 and is being implemented although with mixed challenges. Most people are not aware about the new law.
Operationalise KWS prosecution unit.		Prosecutors for CA deployed and trained	Records on successful prosecutions
Conduct sensitisation programme for judiciaries.		Sensitization retreat for magistrates, judges & prosecutors	Trainings undertaken in all conservation areas mainly

Action	Rank	Achievement	Remarks
		from ECA& MCA conducted in all CAs including, customs and police	supported by conservation NGOs namely AWF, INAW, WWF, etc
Initiate an education and awareness program on elephant illegal hunting and ivory trade issues e.g. campaigns, set up of ivory museums.		Scouts and community leaders trained in Amboseli Walk by elephant Neighbours reaching over thousands of people Education & awareness program in place Senzitisation walk organized in Meru in collaboration with Elephant Neighbours Centre in 2014. Held annual World wildlife day celebrations and World Elephant day Warnings at airports, pumphlets in Chinese language, meeting with Chinese nationals in Kenya	Education program in all CAs not active because of lack of resources. However aggressive compaigns by NGOs has ben going on in print media, television e.g NTVWILD and other programs, radio, walks, ivory burning, etc
Promote regular dialogue with African range states to harmonise position on elephant trade issues, policy and legislation		<ul style="list-style-type: none"> • Improved position on trade issues • Revised policies and legislations 	Dialogue has been going on mostly on the position statement by range

Action	Rank	Achievement	Remarks
			states.
Continue lobbying for sustained elephant ivory trade moratorium in CITES international community		Elephant remains in Appendix I and II of CITES	This is the position Kenya has taken together with other African range states from East, Central and West Africa.

Target 1.3: *Improved community engagement by security force*

Action	Rank	Achievement	Remarks
Conduct awareness programmes on wildlife crime and law in high poaching areas		School outreach programs undertaken monthly PASMAR program in schools TAS program in schools Community barazas undertaken monthly Scouts & community leaders trained in Amboseli, a walk by elephant Neighbours	Awareness programs have been affected by limited financial support since most funds have been committed to anti poaching. However, this is critical to sensitise people about the threats & implications of poaching and the need to support conservation efforts.
Increase active involvement of security staff in local community engagement programmes to reinforce the image of KWS armed wing as a positive force for law and order		Joint operations undertaken with game scouts Over 400 scouts in SCA	This has worked well in areas with NGO support for scouts operations where joint patrols are undertaken frequently
Develop partnerships with local Game Scout Associations (GSAs)		Proportion of GSAs, private scout activities	Game scouts are effectively involved in

Action	Rank	Achievement	Remarks
and private conservancy scouts		involving security personnel	wildlife security having undergone training at KWS Manyani college & undertaken other specialised security related trainings like investigations, forensics, intelligence, etc
Increase understanding of people living with elephants and identify methods to address their issues		Community elephant monitoring program initiated Community elephant trackers from Boji, Tana, Kula Mawe, Kinna & Skott trained hired	Community component to wildlife conservation is key since over 65% of wildlife is on community land. However this key component has been overlooked & not given the necessary support.
Conduct school awareness programs on wildlife protection and conservation		188 schools in ECA WCA 4 schools in reaching 1000 pupils	All CAs have Education Program which works with many schools although the reduced financial support has lowered its operations. No. of students reached is a key indicator
Identify ways to increase value of		Ksh 19 million paid	Number of trips is a

Action	Rank	Achievement	Remarks
elephants / benefit flow from protected areas to communities		annually to group ranches by KWS in Amboseli	wrong indicator Game reserves and parks without tourism earnings do not benefit the local community. Need to explore other ways of benefiting the community

Target 1.4: *Improved cross border protection of elephants*

Action	Rank	Achievement	Remarks
Initiate formal collaboration between Elephant Area Committees and SADC elephant and rhino security groups		No signed MoU between regional groups but group meetings held	This action sound irrelevant unless the Elephant Area Committee eas meant to be East Africa Community. The challenge is that Tanzania belongs to both EAC & SADC. SADC stand of ivory and rhino horn is different from Kenya & Uganda
Develop and implement or review and enhance formal structures where they exist for joint cross border law enforcement operations and intelligence information sharing		Joint security patrols in priority areas Amboseli – West Kilimanjaro and Tsavo-Mkomazi & Mara Serengeti	The joint trans boundary security patrols needs be formalised. EAC Trans Boundary Biodiversity Bill 2010 needs to be enacted
Establish a trans-border		No trans-boundary	Negotiations should

Action	Rank	Achievement	Remarks
collaboration framework		framework established	beginning to establish a framework between the trans boundary countries

Target 2.1: *National elephant distribution increased by at least 30% by 2020*

Action	Rank	Achievement	Remarks
Identify and prioritise areas for extended distribution.		Completed for Magadi & Natron, Amboseli & West Kilimanjaro, Initiatives to revive South Kitui NR, KWS is assisting Kitui County develop a Management plan. Skot-Danyere, Kinna-Grabatula, Ngaya, Nyambene conservancy, Kula mawe- Grabatula areas prioritised for elephant conservation (proposals being developed)(approx. 3,000 Km ²) among other areas	The Action is not clearly stated. Efforts to secure more elephant range are ongoing but requires financial support.
Obtain community support and participation		Community wildlife forums established e.g. Ewaso Wildlife Forum, Makutano-Kanjoo & Ura forums, Laikipia Wildlife Forum,	Action not clearly stated i.e sound ambiguous. Establishment of community conservancies is a good will from the

Action	Rank	Achievement	Remarks
		Signed MOU with Kitui county & with Isiolo county to manage reserves	community for conservation. The over 800 community scouts involved in ensuring wildlife security
Improve wildlife related security in selected areas		Poaching cases reduced significantly since 2014 across the range areas	Action is not specific. There is need to select the areas and work towards implementing the same in those areas.
Establish institutional and legal arrangements to bring new areas into occupation by elephants		Nyambene NR re-established & Kitui & Kerio Valley rehabilitated	Some of these actions sound the same & have similar indicators. Community conservancies could also be new institutions
Develop regional elephant management plan to harmonise cross-border population security and management		Regional Strategy endorsed by State ministries	Implementation of the regional strategies is a challenge since there is no one to follow up and lacks resources

Target 2.2 Elephant numbers increasing by at least 2% per annum where suitable habitat for recovery exists

Action	Rank	Achievement	Remarks
Identify and prioritise areas for population increase		5 areas identified as listed above	Priority areas identified only by some CAs

Action	Rank	Achievement	Remarks
Obtain community support and participation		Community wildlife forums established e.g. Ewaso wildlife forum, Makutano-Kanjoo and Ura forums Signed MOU with Kitui & Isiolo County government	This Action is similar as one above
Improve wildlife related security in identified priority areas based on security assessments		Poaching cases reduced significantly since 2014.	This Action is similar to one above
Establish and monitor population trends based on improved survey and monitoring methods		Elephant surveys were undertaken in 2014 and 2015 mostly in many ecosystems.2 cross border surveys (2 wet & 2 dry) in Amboseli in 2013, in Mara in 2014 (see table of wildlife surveys)	Surveys of most elephants in most forest areas not undertaken

Target 2.3: Systems in place and implemented to improve altered habitats in elephant range by 2021

Action	Rank	Achievement	Remarks
Survey and prioritise areas for intervention through research and monitoring.		The following areas identified - Mwaluganje Elephant Sanctuary, Shimba Hills NR Baseline survey carried out in Nyambene GR;	Slow progress due to lack of financial resources allocated for research. Also the Action is not clearly stated.

Action	Rank	Achievement	Remarks
		Rimoi - South Turkana conservation area	
Identify appropriate interventions through research and monitoring		Interventions such as creation of conservancies, leases, fencing, catchment restoration programs in Kathithi, Meru	The Action also not clearly stated and not very different from the first Action.
Implement interventions (e.g. partial / complete elephant removals, contraception, fencing elephants out of key areas, re-opening corridors) through an agreed decision-making framework; monitor the effects through research and monitoring		Kitenden & Kimana corridors through lease program. An exclosure established next to Aruba Dam and Mzima springs to enhance habitat recovery in an area that had been severely degraded by high concentrations of wildlife	These Actions are lumped together making it difficult to track the implementation of the indicators and assign an appropriate score. Elephants removals have been undertaken & fences put up but contraception has not been tried since it is expensive. Corridor opening through lease program has worked in Amboseli

Target 2.4: *At least 10 corridors, including cross-border ranges, and buffer zones established and maintained, along with existing buffer zones and corridors*

Action	Rank	Achievement	Remarks
Identify and prioritise corridors and buffer zones to allow dispersal		Status of corridors and buffer zones report	This report was poorly written and

Action	Rank	Achievement	Remarks
between preferred habitats		(2009) Ecosystems based reports e.g Kimana, Kitenden & Maparasha corridors and South Turkana Rimo corridor	needs to be reviewed & shared with the Ministry of Environment & Natural Resources for gazettment
Establish process to create corridors and buffer zones through an agreed decision-making framework.		Process agreed across government and civil society	National survey of corridors undertaken but no follow up. Need to develop case by case corridor strategies
Establish a \$10m fund to finance establishment of corridors and buffer zones.		No fund in place	This will solve the many threats facing elephants since poaching & HEC are all hinged on range and habitat loss & lack of benefits
Obtain community and political support and participation in targeted corridors and buffer zones		Community conservancies established to secure the corridors and group ranches maintaining some areas for conservation through their management plans Lease agreement signed And participation in the county spatial	It is happening but not fast enough and not in all areas

Action	Rank	Achievement	Remarks
		planning process	
Ensure EIA is carried out and effectively used for decisions on any planned developments in elephant corridors		EIA undertaken for all projects e.g. Kilimanjaro water pipeline, Simba Cement Factory, Electric fences, SGR, Taveta-Voi road, oil pipeline etc	Many electric fences and water abstractions for farming have not been subjected to EIA

Target 2.5 Principle of elephant management that allows natural population regulation accepted nationally and internationally

Action	Rank	Achievement	Remarks
Establish the science base for this position		No research-based policy in place	There is a clear disconnect between the action and the indicator
Create media resources to explain policy		No materials completed	Communication & training departments not aware about this action
Create training materials and train relevant KWS staff to explain policy; conduct awareness.		No training materials in place	Communication & training departments not aware about this action

Target 3.1: Effective and sustained systems for monitoring elephant numbers in key forest and rangeland populations carried out every four years.

Action	Rank	Achievement	Remarks
Conduct aerial census of key rangeland populations every four years (Tsavo, Meru, Laikipia/Samburu, Amboseli, Mara / Narok, Nasolot /South Turkana1)		Elephant census was undertaken in all the six ecosystems between 2013 & 2015. 2 census in Tsavo in	Dissemination of the results remain a key challenge. One more census before the end of the Strategy

Action	Rank	Achievement	Remarks
and where census is not possible an estimate through surveys		2014 (sample & total count); 1 census in Mara-Serengeti - Narok in 2014; Meru aerial census in 2014; Nasolot / South Turkana aerial census in 2015	period is expected.
Refine and test methods for improved surveys of forest populations (Mt. Elgon)		Not done. Not assigned to any specific person for action	Is planned for after the Strategy review stakeholders workshop
Apply standardised improved forest survey method(s) to key forest populations (Mt. Elgon, Mt Kenya, Aberdares, Mau, Marsabit).		Methodology yet to be refined & lack of funding	A survey was undertaken in Mt Kenya which will be replicated in other forest
Carry out surveys to establish status of less known populations (aerial/ground) (e.g. Boni / Dondori, Lamu / Tana River, Malka Mari, Turkana / Kidepo, Nguruman / Mau).		No surveys in Boni/Dondori, Turkana / Kidepo valley, Mau, Malka Mari Surveys done in Lamu, Tana River	Due to insecurity (<i>Alshabab</i>) in Boni / Dondori forest & Kenya Defence Force declared it a no go zone.

Target 3.2: Standardised ranger / scout based monitoring implemented by 2013 in four priority areas to provide information for management and TRAFFIC/CITES.

Actions	Rank	Achievement	Remarks
Pilot MIST system in two PAs within two years (Tsavo, Mara)		MIST used in 2012 but discontinued in most places	KWS not using MIST in most places which was negatively perceived by rangers. Conservancies using SMART, WILD &

Actions	Rank	Achievement	Remarks
			cybertracker
Expand MIST to two new areas based on trials		MIST failed immediately it was commissioned	
Standardise elephant mortality monitoring and reporting country-wide in collaboration with other partners.		Standardised elephant mortality database in place With harmonised data from all the regions	This has been done to avoid double reporting as it was the case.
Harmonise national and Monitoring the Illegal Killing of Elephants (MIKE) monitoring and reporting system.		Harmonised database on illegal killing of elephants in place. However, standardised annual reports produced and disseminated	There are challenges in the four classifications for elephant mortality where opportunistic poachers remove ivory from a dead elephant whose cause is unknown.
Establish a community scouts to KWS data flow system on elephant numbers, demography and distribution		Community scouts established & generating data on elephant distribution	Some partners have a challenge of analysing data & report writing. Some scouts are not literate.

Target 3.3: *Data from research and monitoring used in elephant management and policy formulation throughout strategic plan period*

Action	Rank	Achievement	
Carry out research in identified critical enclosed populations to determine model / methods for estimating the persistence through time of plant and		Research on the persistence through time of plant and animal communities at different elephant	Not done due to lack of funds

Action	Rank	Achievement	
animal communities at different elephant densities (identify critical closed ecosystems to conduct research).		densities Not undertaken	
Initiate / continue research / monitoring in identified sites (e.g. Aberdares, Shimba Hills, Laikipia) to determine the effects of fencing on both habitats and elephant populations (identify sites for research/monitoring).		This was not undertaken	Lack of funds for research
Conduct research, including experimental application, on techniques and consequences of contraception and translocation on both affected animals and remaining population		No research on contraception and translocation consequences due to lack of funds	Poor coordination of research by external scientists and follow up on publications.
Research and trial emerging methods or combinations of methods including traditional/indigenous approaches to reduce HEC.		Bee fences in Lower Imenti, KWS / STE bee fence project in Tsavo & Laikipia, WWF in Mara	It is only STE that is doing research on bee fences & have published scientific papers
Establish systematic monitoring of effectiveness of interventions on human-elephant conflict.		A systematic monitoring tool for bee fences only by STE and not other interventions	Lack of coordination
Monitor and rank effects of elephants on ecosystem structure and function inc. important plant and animal species in all critical		Experimental habitat rehabilitation plots established and operationalized in	No reports shared

Action	Rank	Achievement	
habitats, with results feeding back to decision-making framework		Amboseli ecosystem by ACP	
Assess and monitor habitat fragmentation and change both nationally and trans-boundary		National report and ecosystem based reports exists	The reports are not updated & there is need for update for proper planning by knowing what is still available for elephants
Monitor levels of human encroachment in identified critical corridors (e.g. Isiolo / Immenti, Isiolo / Meru, Oldonyiro / Kipsing)		Not done	Lack of funds
Expand the study of elephant movement patterns in identified areas (e.g. cross-border populations, less well known populations, key corridors) using radio tracking technology		Over 60 Collared elephants in Amboseli, Mara, Laikipia, 12 elephants in Amboseli	Although these areas have known populations. Some collars have stopped working
Develop research activity on elephant disease prevalence and impact particularly during stress conditions such as drought		Not done	Mobile vets monitor disease prevalence & intervene but no research
Conduct cost-benefit studies on the role of elephants in revenue generation; and land use and livelihoods in elephant landscapes		No study done	No funds and could be assigned to masters and PhD students
Investigate impacts of climate change on elephant habitat and elephant populations through		No research undertaken.	Meru NP is used as case study for the development of

Action	Rank	Achievement	
appropriate research			National Climate Change Strategy. KWS developing a climate change mitigation Strategy for wildlife areas
Identify additional critical research needs/knowledge gaps.		Was done through Elephant Research Fund	A list of potential research areas was compiled by the Elephant Program coordinator with input from members of the fund

Target 3.4 *Information on ivory movements collected and effectively used to control illegal trade throughout the strategic plan period*

Action	Rank	Achievement	Remarks
Continue providing information to TRAFFIC and Elephant Trade Information System (ETIS)		Ivory trade data shared with TRAFFIC and ETIS	See a report by Sam Weru (2015) on Kenya
Train KWS personnel in analysis and interpretation of ivory trade data.		Increased capacity of KWS staff in data analysis and interpretation to feed into MIKE and TRAFFIC data	KWS scientists have been trained on data analysis
Modify and improve the existing security database for more effective and timely analysis of data.		Database constantly reviewed and improved	
Use DNA analysis to establish origins of confiscated ivory.		Origin of confiscated ivory established	Forensic lab being equipped and staff underwent a training in South Africa

Target 4.1: *Conservation compatible land use in areas of existing potential HEC*

Action	Rank	Achievement	Remarks
Assess, review and recommend appropriate land uses in specific areas		Land use maps produced and provided to decision-making framework in some areas including County spatial plans	This has only been done in areas that have partners
Review, recommend, and continue to lobby for changes in legislation for conservation-compatible land use		Not yet done but community conservancies now recognized in the Wildlife Act 2013 and input into county spatial plan	Is a challenge due to conflicting sectoral policies
Sensitise District Environmental Committees (DEC) on elephant and wildlife issues		Meetings have been held in Kajiado and Meru counties	This is obsolete after devolution and most are just being formulated now under County Environmental Committee
Use District Environmental Committees for constituency-level cross-sectoral planning.		Only done in Kajiado	DEC is now referred to as County Environmental Committee (CEC)
Initiate process for developing community conservancies in appropriate areas		Over 200 community conservancies in registered and more are being proposed (see KWCA report)	This is an ongoing initiative on the need basis and availability of resources and particularly by conservation NGOs.
Conduct cost – benefit analysis of		No undertaken	Due to lack of

Action	Rank	Achievement	Remarks
elephant friendly crops through pilot studies and promote viable solutions			funding
Sensitise NEMA on wildlife and elephant issues.		In Amboseli, NEMA are actively involved in wildlife conservation – Gazettement of AEMP, Kimana Wetland gazettement, approving EIA reports	NEMA has not been fully involved in matters that may affect elephants hence allowing many projects to go on with negative implication on elephants e.g. infrastructure developments, fencing, large scale farming
Ensure new developments in elephant distribution range (including fences, structures etc) undergo EIAs and that existing developments undergo an environmental audit.		Most private projects especially huge farms with electric fences have not undertaken EIAs. Audits conducted only in tourism facilities and several were closed down	No records of developments with EIA undertaken hence not easy to quantify

Target 4.2: Protection from elephant damage of crops & property

Action	Rank	Achievement	Remarks
Review existing fences and identify underlying determinants of fence performance		Most fences are not working and no study on their effectiveness has been done	Fencing unit and research section have no funds for studies
Develop and implement national fence plan.		The national fence plan has not been	Fence in the western boundary of Meru

Action	Rank	Achievement	Remarks
		developed. Only a fence policy exist	NP,
Establish/Enhance a fencing technical support and maintenance unit within KWS.		A fencing unit is operational and provides technical support to all efences in the country except monitoring	Fence management units established
Trial deterrants (disturbance methods and various innovative technologies) to determine potential effectiveness in different sites		STE has published and disseminated on Bee fences. Others by Space for Giants on chilli spray.	The indicators not clearly linked to the aaction since it talks about publications & exchange visit
Build / Establish institutional and technical capacity of communities to use available and test elephant deterrrents		Conflict resolution committes established. County Compensation Committees established as per Wildlife Act but no funds to operationlise Many farmers and scoutstrained & supported in HEC mitigatione.g. over 2,500 in Amboseli	Most orgnaisations do not keep data on training
Improve awareness in affected communities about elephant conservation and HEC		HEC mitigation senzitization being undertaken regularly in baraza's Group ranch leaders &	Conflict is the order of the day and sensitisation is a continous process & no data is kept

Action	Rank	Achievement	Remarks
		county Government	
Trial innovative technologies such as satellite tracking, geo-fencing etc. in the control of potential problem animals as part of research and monitoring.		Use of camera traps to monitor crop raiding in Amboseli and Mara Camera traps and geo-fencing in Mara and Laikipia	No strong and clear research component by most trials since the partners are not research organisations

Target 4.3: *Corridors secured in areas of existing or potential HEC by 2021*

Action	Rank	Achievement	Remarks
Integrate HEC and other elephant data into the planning process for creating corridors and buffer zones as part of population expansion and habitat maintenance program.		Elephant movement using collared data and HEC being integrated into management plans & County Spatial Plans in Kajiado, Narok, Samburu, Isiolo, Meru, Kwale, Tana River counties among others	KWS and conservation NGOs and investors should be actively involved in the spatial planning process to secure critical wildlife areas for conservation

Target 4.4: *Management of HEC informed by sound data collection and analysis*

Action	Rank	Achievement	Remarks
Centralise, standardise and harmonise data collection and reporting system through clear protocols implemented by stakeholders, training and operational database system		HEC database system developed by KWS & partners people trained in data collection & the national status of conflict annual report	In TCA 5,527 incidents (2012-2015). This figure contradicts with the national figure which averages 1,300 incidences per year. The true status of HEC in Kenya remains unclear

Action	Rank	Achievement	Remarks
Increase data collection coverage to at least 10% of HEC area.		HEC data is being collected in all the eight KWS conservation areas	This is difficult since the baseline survey was not done
Enhance involvement of local game scout associations, in the detection and reporting of problem animal incidents, and in earlier warning of potential occurrences to KWS.		A network of over 600 community game scouts & elephant trackers are involved in HEC mitigation.	Need to establish game scouts associations where they don't exist & build their capacity in HEC mitigation
Analyse data and generate standardised reports on a timely basis.		HEC annual reports are generated but fail to give a true reflection of the status of conflict in the country due to under reporting	Standardised reports should emanate from all the CAs to fit into the national HEC report
Incorporate results of data analysis into the coordination and decision – making framework of KWS and stakeholders at local level.		A series of management decisions have been made including translocation, fencing, elimination of problem elephants, resource mobilisation, capacity building etc.	

Target 4.5: *Capacity of KWS in HEC resolution and mitigation enhanced by 2015*

Action	Rank	Achievement	Remarks
Develop and implement HEC training program (including conflict resolution, community engagement and PAC).		HEC mitigation training program not developed	Training has nothing to do with decline in HEC.

Action	Rank	Achievement	Remarks
Deploy KWS personnel experienced in HEC issues and mitigation.		PAMU team and all KWS rangers in all stations attend to HEC incidences	The indicators are not clearly linked to the action
Acquire necessary additional resources such as equipment for HECmitigation		Equipment e.g. powerful torches, fireworks, pressure horns, thunderflashes, chilli guns, motorcycles been acquired & deployed including occasional support by helicopter & fixed wing plane in hotspots	No clear records on the actual number exit.
Develop and implement plan to manage HEC, integrating both local communities and other stakeholders in participatory planning		Comprehensive HEC plan developed for Amboseli ecosystem & Mountain CA but not other areas have come up with a detailed plan. However, adhoc implementation of the actions in the Strategy is ongoing	This is priority since HEC is becoming the biggest threat to elephants

Target 5.1: *Enabling policyenvironment in place toencourage landownersand communities to accommodate wildlife*

Action	Rank	Achievement	Remarks
Assess attitudes towards elephants within the context of current policy among owners of		No study has been undertaken to assess the community	Different policy components may not totally influence the

Action	Rank	Achievement	Remarks
land of strategic importance to elephant conservation		attitudes towards elephants under the new Wildlife Act.	attitudes since there are other variables to consider like benefit sharing
Review, recommend, lobby for and implement enabling legislation and regulations to encourage communities and landowners to accommodate wildlife and for stakeholders to take a greater role in the conservation of elephant		Wildlife Act been enacted recognises community conservancies and scouts and regulations for implementation are under review for community support as shown by the increasing number of community conservancies.	This is hindered by external factors like low tourism numbers and lack of alternative source of benefits

Target 5.2: Increased income generation from tourism in elephant conservation areas across Kenya

Action	Rank	Achievement	Remarks
Conduct assessment of future tourism potential, requirements for sector growth and existing capacity within each cost bracket (low, medium and high) in Kenya		Tourism circuits developed and detailed County Tourism Master plans are being developed	No all counties have developed a tourism master plan
Identify sites for tourism development within strategic elephant range areas across government, private and community owned land		Sites for tourism potential surveyed for most counties e.g. Kitui, Kajiado.	Need to set aside funds for tourism development or market the sites to potential investors
Develop tourism concession agreements for sites identified		Tourism concessions Developed for Meru,	The slump in tourism affected tourism

Action	Rank	Achievement	Remarks
		etc	development due to low interest by investors

Target 5.3: *More sustainable compensation, consolation and insurance mechanisms against losses from elephant damage trialled and if successful implemented*

Action	Rank	Achievement	Remarks
Review and assess global and national systems of compensation mechanisms and make recommendations for national policy		Report on the review of the systems of compensation	IUCN AfESG has a report on compensation. The inclusion of compensation in the wildlife Act was not informed by research & this explains why the government cannot afford to pay
Assess success of existing consolation scheme in Amboseli and expand to other areas if appropriate		No assessment report on existing consolation scheme in Amboseli	Compensation is now in the new Act. Consolation has a challenge of sustainability.
Encourage stakeholder participation in Elephant Consolation Schemes where appropriate		Only one partner (ATE) participating in consolation schemes	A consolation scheme has now been overtaken by events with the compensation scheme in place
Investigate more sustainable approaches such as environmental risk insurance schemes, locally-based rural conservancy compensation schemes and micro-finance approaches to diversify local livelihoods and support		These strategies have not been taken on effectively especially the compensation scheme. Consolation scheme has been tried and business but they don't solve	Insurance scheme for wildlife conflict has not been tried. Focus has been on crop & livestock loss due to drought

Action	Rank	Achievement	Remarks
implementation		conflict but simply cushion the affected people somehow	

Target 5.4: *At least 30% of existing unprotected elephant range in arid or semi-arid lands is protected under community conservation governance structures*

Action	Rank	Achievement	Remarks
Identify existing unprotected elephant range located in arid or semi-arid areas		Map of elephant range outside PAs exist but the areas need to be extrapolated	There is need to update the elephant range since some areas have lost elephants completely e.g. Siyabei – Uaso Nyiro
Identify existing land-tenure, land governance entities and key leaders within these elephant range areas.		Land tenure and governance is known in elephant range areas	Why key leaders? And these leaders are known anyway.
Encourage and support the creation of representative community conservation entities and associated conservancies within unprotected elephant range areas		KWCA was established Over 200 registered conservancies in Kenya Amboseli (9), Mara, Laikipia, Samburu, Baringo, Marsabit, Tsavo, Meru (6), Elephant sanctuary (1), Community sanctuary (1)	This is more less repeated since community conservancies is cross cutting. Group ranches/private ranches, elephant sanctuary are not considered here and yet are key
Develop work plans and budgets for management of community conservation areas.		Work plans and budgets developed and implemented	This is mainly by conservation partners working outside PAs. management plans for

Action	Rank	Achievement	Remarks
			Amboseli
Establish agreements with investors, donors and conservation NGOs to provide management, governance, technical and financial support to conservancies.		Conservation partners & investors have supported the establishment of over 200 community conservancies and their conservation initiatives through fund raising	Some established conservancies have no support from NGOs and investors and hence not functional
Provide training for effective conservancy management (security, ecological monitoring, fundraising, grazing management, accounting, governance etc.)		Over 150 functional conservancies have received trainings in security, ecological monitoring, fundraising, grazing management, governance in Amboseli, Laikipia, Baringo, Mara, etc	Holistic grazing, wildlife security and ecological monitoring by scouts,

Target 5.5: *Improved livestock management, grazing systems, optimal cattle densities and market penetration among pastoralist occupied parts of Kenya's elephant range*

Action	Rank	Achievement	Remarks
Review and trial management interventions for rangeland rehabilitation that are acceptable to and can be supported by pastoralists		No publication but rehabilitation is happening In Amboseli (Siana women)& Laikipia / Samburu, Holistics zone grazing in Amboseli, Mara,	The indicator is contrary.

Action	Rank	Achievement	Remarks
		Samburu	
Review and trial mechanisms for facilitating pastoralist entry into the cash economy (converting cows to cash or other forms of saving) that are acceptable and can be supported by pastoralists		No publication Livestock slaughter house and market in Amboseli, Mara, Laikipia, Samburu,	Requires education & awareness creation to change the mind set of pastoralists from many cattle to a few quality livestock
Design a livestock support tool kit appropriate for pastoralists (water, drought intervention, veterinary support, predator management and compensation for loss of livestock to elephants)		No tool kit developed but related activities are being undertaken such as Predator Proof Boma, water harvesting, PCF, Elephant Consolation fund in Amboseli, training in livestock husbandry	Mosy conservation NGOs are implementing these activities in Amboseli, Laikipia / Samburu
Establish a pastoralist outreach support programme for unprotected elephant range areas occupied by pastoralists incorporating each of the previous components (range land rehabilitation, livestock marketing and livestock support). Ensure this programme is coupled with elephant conservation.		Livestock support programs are functional e.g. ALMA in Amboseli over 2,500 pastoralists and Laikipia	In Amboseli, the proceeds from the slaughter house will go towards paying community scouts salaries

Target 5.6: *Potential for elephant compatible enterprise options understood and supported*

Action	Rank	Achievement	Remarks
Review progress of the USAIDfunded Laikipia Wildlife Forum bio-enterprise project in north Kenya and other similar projects in East and Southern Africa to establish the real potential for conservation compatible enterprise options (such as honey, harvesting of natural resins etc.) in elephant range areas		Published report, identified potential nature based enterprises and their viability	This is too specific and yet there are many conservation enterprises
Support implementation of viable conservation compatible enterprise options		Conservation enterprises e.g tourism, bee keeping, livestock keeping, smart agriculture, etc being tried in Mara, Amboseli, Tsavo, Laikipia, Samburu etc	These enterprises are ongoing in some areas but faces the challenges of market, climate change, poor adoption by the community, lack of capacity, etc

Target 6.1: *Human capacity for effective Strategy implementation*

Action	Rank	Achievement	
Conduct review of staffing levels and training needs on periodic basis through KWS regional management; Identify minimum staffing levels for each elephant conservation area		Needs assessment is undertaken annually & staff supported for specialised training including in house and or external training	
Rationalise KWS staff related to elephant conservation and develop Terms of Reference for staff in key positions; review on regular basis		KWS posts staff depending on the need and has trained two groups of over 1,000 at Mayani Training College since	Some sections of the action for ToR look irrelevant. Staff are posted not specific to elephant conservation

Action	Rank	Achievement	
		2012	
Recruit necessary personnel as identified and maintain staffing levels at least at identified level		KWS recruited & trained two groups of over 1,000 rangers and 520 management trainees at Manyani Training College since 2012	Staff strengths in elephant conservation levels may not be a good indicator
Institutionalise elephant security, monitoring and community interface focussed ranger based modular training at KWS Manyani Field Training School and technical training at KWS Naivasha Training Institute		Induction courses are frequently offered at Manyani based on the needs assessment undertaken	
Ensure/conduct targeted training as specified in this Strategy document and identified in needs assessments; review progress		Several training programs were conducted either internally or externally & also by partners	There is need to mention some of the courses undertaken and classify them accordingly e.g short course, academic or professional, etc
Institutionalise skilled staff retention in relevant positions through KWS regional management and HR department.		Levels of skilled staff turnover is very low	Motivation of rangers and other staff is key to reduce staff turnover
Ensure at least 75% of the ranger force is available for daily security surveillance in the elephant conservation areas		Rangers off and leave days are carefully planned to ensure enough personnel on the ground for patrols and	Increased use of technology might reduce the boots on the ground

Action	Rank	Achievement	
		wildlife security patrols	
Build capacity of judiciary and police to effectively enforce laws on elephants and other wildlife		Judiciary, prosecutors, customs & police training were undertaken in all the 8 CAs.	This action is repeated

Target 6.2: *Necessary tools for effective security, research, monitoring mgt, HEC resolution & community engagement*

Action	Rank	Achievement	
Conduct equipment needs assessment on periodic basis through KWS regional management. (report on your regional needs)		Monthly and annual needs assessment undertaken	This action is repeated
Procure and provide necessary equipment, with assessment of condition of equipment and replacement on timely basis		Lots of different types of equipment were procured over time by KWS and partners including GPS, smart phones, communication equipment, computers and laptops, night vision goggles, digital cameras, radio collars, etc	This action is repeated

Target 6.3: *Appropriate and adequate infrastructure for Strategy implementation*

Action	Rank	Achievement	Remarks
Conduct needs assessment with review on periodic basis through KWS regional management		Needs assessment done annually for decision-making	This is repeated action
Undertake feasibility studies and		EIA and feasibility	This is repeated but

Action	Rank	Achievement	Remarks
EIA as appropriate		study undertaken for major projects like SGR, highways, fencing, etc for decision-making	again so many project e.g. electric fences have not done EIA
Construct / provide necessary infrastructure on a timely manner.		Infrastructure development has been ongoing by national and county governments, KWS & partners including roads, offices, education centres, outposts, fence, communication systems etc.	The action is ambiguous and not clear

Target 6.4: *At least 25% of the cost of elephant conservation is covered by new sources of conservation finance by 2021*

Action	Rank	Achievement	Remarks
Assess potential of carbon credit (REDD) and incipient biodiversity credit markets for generating finance for the conservation of elephants and elephant habitat.		REDD+ project in Chyulu & carbon credit project by Wildlife Works in Tsavo	This has been slow and no much tangible benefits derived so far. Other forest areas e.g. Mau, Shimba Hills, Mt Elgon, Mt Kenya, Aberdares, Boni Dondori, etc should be considered.
Explore options for private and public company sponsorship of specific elephant conservation areas as part of corporate social responsibility branding (such as		This has not been undertaken	Poor coordination at the elephant coordination office to assign the responsibility

Action	Rank	Achievement	Remarks
Virgin, Kenya Airways, Tusker etc.).			
Explore options for private sector partnerships for co-managed and conservation of protected and unprotected parts of the elephant range		Investors in conservancies & private and group ranches and Mara Conservancy managing Mara Triangle	This is slow due to tourism challenges in the country but it is ongoing
Establish an international endowment fund for conservation payments to custodians of elephant range areas		No endowment fund established.	Poor coordination at the elephant coordination office to implement this
Finance secured from each of the previous components to cover elephant conservation costs.		KWS & partners received finances & are implementing the Strategy actions appropriately.	The target was not clearly stated

Target 6.5: Innovative approaches for raising funds for elephant conservation and management
Implemented by 2021

Actions	Rank	Achievement	Remarks
Host an annual meeting for the most successful international businessmen and entrepreneurs 'Entrepreneurs for Elephants'. This will be held in Kenya's most exclusive and beautiful wildlife areas to brain-storm on raising finance for effectively implementing elephant conservation programmes in the modern world.		This was not undertaken	This action just like many other actions not directly related to elephant conservation was never assigned to anyone to take lead

Target 7.1: A well coordinated and managed framework supporting stakeholders & enhancing decisions

Action	Rank	Achievement	Remarks
Establish Elephant Executive Committee (EEC) operating from clear ToR		EEC is in place	No meeting held so far due to lack of finances
Establish Elephant Technical Committee (ETC) operating from clear ToR		ETC is in place	Only one meeting held so far but hindered by lack of finances
Establish Elephant Management Committee (EMC) operating from clear ToR		EMC is in place	No meeting held so far due to lack of funds to bring partners together
Establish KWS Area Elephant Committee (AEMC)		AEMC is in place in 3 regions only and have held no meetings apart from TCA	Lack of funds to bring partners together and poor coordination
Implement structures and reporting lines for all components of the National Elephant Programme.		Not done due to lack of coordination	Poor coordination by the elephant program coordination office
Coordinate harmonisation of Wildlife Policy with other development sectors in governmental and non-governmental circles to secure elephant habitat		There is no wildlife policy	There is need to develop the policy to operationalise the Act.
Hold trans-boundary meetings involving all concerned stakeholders at least annually		Regular ecosystem based trans-boundary meetings held in Amboseli-Kilimanjaro & Mara-Serengeti and biannual security meetings	Other trans-boundary areas have not been active e.g. Uganda, Southern Sudan, Ethiopia.
Coordinate harmonisation of policies and strategies		No country policies harmonised	Strategies by conservation NGOs on

Action	Rank	Achievement	Remarks
with neighbouring countries and where not possible, initiate agreement of boundary 'buffer zones' for the management of elephant range, elephant protection and anti-poaching activities			transboundary buffer zones e.g. Amoseli and Enduimet WMA
Coordinate joint international action on issues of ivory trade and trafficking.		Joint statements, documents, actions through African Elephant Coalition member states	KWS has been vocal and on the fore front in coordinating ivory trade and trafficking issues together with partners
Coordinate and produce KWS regional elephant status reports, synthesise national report and communicate back to each elephant conservation area as appropriate and recognising the multi-year census cycles		Regional elephant status reports produced and synthesised into national status report and disseminated to regional stakeholders	KWS has put a lot of emphasis on this
Coordinate transparent donor and targeted technical support and research activities with national and international agencies to enhance outputs of the conservation programme		Funding proposals developed but no funding yet	Fund raising remains a major challenge which affects the implementation of the Strategy & heavy reliance on conservation partners
Encourage and support improved capacity and increased activity of NEMA in controlling the environmental impact of developments in elephant distribution range		Involvement of NEMA in controlling environmental impact of developments is not adequate & many	More less similar to the above action on NEMA

Action	Rank	Achievement	Remarks
		fences have no EIA clearance	
Publish relevant articles on elephant activities in journals and media on a timely basis		Publications from aerial census and HEC	Amboseli has produced some publications but most organisation with no research interest are not keen on publications. KWS researchers are demotivated to write publications
Accessible online searchable database to which anyone working on elephants in the country would be required to contribute		No searchable online database	Poor coordination at the elephant coordinating office

Target 7.2: Conservation and Management Strategy for Elephants implemented nationally

Action	Rank	Achievement	Remarks
Develop annual work-plan for implementation at the start of the financial year (including budget, actions and responsibilities and review by the ETC).		No annual work-plan and budget produced apart from workplans based on areas/ecosystems which were not guided by the Strategy	There is need for proper coordination of developing a work-plan by the elephant coordinator and a budget allocated to the Strategy
Identify and ensure funding required for all essential activities for the year is available from the start of the financial year		The Strategy does not have a specific budget and actions are supported from a pool of funding	The coordinator should have a budget to coordinate the implementation of the Strategy and some actions that are not field based
Explore a range of revenue generating opportunities		No funds raised by KWS	This seems poorly stated and should read fund

Action	Rank	Achievement	Remarks
and support			raising opportunities
Conduct biannual review of progress in implementation of Strategy		No evaluation has been undertaken	A robust M&E system at field and national level will make it easy to generate annual reports & easy evaluation
Develop and implement awareness programs targeting schools, local communities, policy makers, NGOs, business sectors etc.		Awareness program is ongoing in all regions through local baraza, schools, vernacular radio stations etc with partners. E.g. annual events such as World Elephant Day, World Wildlife Day, Elephant voices has a strong awareness program that is reaching many people through NTV Wild, schools program, etc	The challenge is funding and equipment
Develop and implement a communication and information sharing Strategy to stakeholders		A communication Strategy developed by KWS	Most partners are not aware about this Strategy & it should be shared widely
Develop a clear sustainable financial plan (e.g. as component of planned KWS endowment fund) for implementing key components of the Strategy and for achieving long term financial sustainability for elephant		No financial plan developed	ERF has never raised resources and has not supported research students for quite a while

Action	Rank	Achievement	Remarks
conservation to supplement the established Elephant Research Fund			

Annex 3: List of people/ organizations interviewed

Name	Institution	Email
Kitili Mbathi	Kenya Wildlife Service (KWS)	
Manegene Stephen	Ministry of E&NR	
Joseph Edebe	Kenya Wildlife Service (KWS)	edebebej@kws.go.ke
Simon Gitau	Kenya Wildlife Service (KWS)	sngitau@kws.go.ke
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Jacob Mwanjala	Kenya Wildlife Service (KWS)	jkizelem2008@yahoo.com
Julius Cheptei	Kenya Wildlife Service (KWS)	cheptei@kws.go.ke
Patrick Omondi	Kenya Wildlife Service (KWS)	pomondi@kws.go.ke
Dickson Too	Kenya Wildlife Service (KWS)	toodickson@yahoo.com

Conservation Organizations and private sector

Robert Ndeti	World Wildlife Fund (WWF)	rndeti@wwfesarpo.org
Cynthia Moss	Amboseli Trust for Elephants (ATE)	cmoss@elephanttrust.org
Holly Dublin	IUCN African Elephant Specialist Group (AfESG)	holly.dublin@iucn.org
Steve Njumbi	International Fund for Animal Welfare (IFAW)	snjumbi@ifaw.org
	Monitoring of Illegal Killing of Elephants (MIKE)	
	OI Pejeta Conservancy	chimps@olepejetaconservancy.org

George Aike	Mpala Research Centre (MRC)	gaike@mpala.org
David Kimit	Mpala Research Centre (MRC)	dwkimiti@gmail.com
Lucy King	Save the Elephant (STE)	lucy@savetheelephants.org
Winnie Kiiru	Stop Ivory	winnie@conservationkenya.org>
Tim Oloo	Born Free Foundation	toloo@bornfree
Patricia Awori	Kenya Elephant Forum	aworipats@gmail.com

County Governments within the elephant range

Name	County
Michael Koikai	Narok
Ole Seno	Narok
Moses Murunya	Kajiado
Benson Lengalen	Samburu
Mukhwana Chris	Bungoma
George Kombo	West Pokot

Tanzania

Honari Maliti	TAWIRI
David Luofumfia	TANAPA
Genes Shayo	TANAPA
Paul Gwaha	Mkomazi NR
Peter Kubingwa	DGO Longido
Paul Onyango	KDU (Anti-poaching unit)

Annex 4: Stakeholders workshop key outcome and action plan

After the presentation of the results of the preliminary survey, the workshop then focused on identifying and prioritizing new and existing actions that KWS and partners should seek to implement over the next five years. Participants working in four groups used a dynamic process to provide input on key actions to implement based on the seven strategic objectives laid out in the Elephant Strategy. The actions were then prioritized accordingly, which was essential, as resources for elephant conservation (and conservation in general) are limited. The results in the tables below represent the input of numerous elephant specialists, many with several decades of experience in elephant conservation, and, as such, are a valuable product to guide KWS and partners.

Group themes that were grouped according to NEAP objectives

Themes for Group Input	Corresponding NEAP Objectives
GP1: Protection	1. Protection
GP2: Population expansion, research, and monitoring	2. Population expansion and habitat maintenance 3. Research and monitoring for management
GP3: Human wildlife conflict and incentives	4. Human elephant conflict 5. Incentives
GP4: Coordination and support	6. Capacity 7. Coordination and support

Group 1: Prioritized Actions and Details on protection

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
Increase community engagement in protection – through improved incentives (30)	KWCA and KWS and NRT		KWCA; NRT; Big Life; IUCN; DSWT; WWF (Olasiti)

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
To address Mombasa trafficking hub – strengthen KWS authority and strengthen and increase collaboration with customs and other authorities (18)	Needs an anti-corruption commission Not led by KWS		
Conduct an assessment of law enforcement capacity, needs, and standards for each site and the nation. (16)			ICCWC toolkit; UNODC Do a gap analysis
Increase capacity (training and support) to improve prosecutions (e.g., using DNA) and judicial system (e.g., sensitize judges) as well as support forensics. (15)	Wildlife Direct Space for Giants KWS		Space for Giants; Wildlife Direct; UNODC; Interpol; Ulinzi Africa Foundation; ANAW; KWS
Increase use of technology (e.g., night vision equipment for surveillance) (12)			ZSL; Vulcan; Bilateral Govt Donors
More engagement with demand countries – strengthen Lusaka Agreement Task Force (10)	LATF and CITES (management authority of Kenya) and Interpol + STE		China House; Freeland Foundation; Wild Aid

Group 2: Prioritized Actions and Details on population expansion, research, and monitoring

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
Integrate the development of corridors with development planning e.g. roads, railways and settlements. Need pro-	TNC, KWS, Ministry, Conservation	Aberdare/ Mt Kenya National Parks, Tsavo,	Lapset: GTZ, TNC, SFG, NRT, Marwell,

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
active planning of corridors and to engage with relevant ministries and county governments. (25)	Alliance.	Amboseli-Magadi-Mara	Ewaso Lions.
Create a functional research and monitoring working group (technical committee) to enhance collaboration among elephant researchers and practitioners. (25)	KWS		
Replicate forest surveys in other forest priority areas (22)	WCS, KWS		
Investigate potential impacts of elephants in confinement (Review Strategy for managing enclosed populations of elephants) (20)	MMU	Aberdare National Park	
Develop an integrated framework for data collection and management at the site, regional and national level. Create an information-sharing platform (internal and external) (15)	KWS		
Revive elephant research trust fund (13)	KWS		
Review and prioritize elephant corridors for gazettment	KWS, STE		

Group 3: Prioritized Actions and Details on human wildlife conflict and incentives

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
Consider payment for ecosystem services to support community benefit sharing – Nationally and regionally (22)	Ministry of Environment* (various agencies – KWCA, KWS, National	South Kenya (Narok county to Kwale);	Wildlife Works-Tsavo, Chulu RED++; NRT (cattle to market, grazing);

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
	Focal REDD+, TNC, NGOs mentioned in last column		TNC water fund; ACC
Engage with county governments on spatial land use planning to ensure wildlife are included and corridors provided (21)	Ministry of Environment* Conservation Alliance* Land Commissions; DRSRS*	South Kenya (Narok county to Kwale);	Rhino Arc; WWF (Kwale, Lamu; Narok); STE; Rhino Ark; NRT; Tana River;
Create policies and guidelines for problematic animal control & retaliation; Establish trained, equipped animal control unit (21)	KWS*; + County Wildlife Conservation & Compensation Committees + Big Life; ATE; Lewa; DSWT (CAK)		KWS; Big Life; ATE; Lewa; DSWT
Review successes/ failures of elephant fences with recommendations about fence design, innovation, effectiveness, cost (17)	Chris Thouless*, Rhino Ark*, MMU, MKT, Lewa, KWS, LWF, Space for Giants		Chris Thouless, Rhino Arc, MMU, Space for Giants, MKT, Lewa, KWS, LWF
Create and train at grass roots level (e.g., farmers, community leaders, county officials) toolbox for conflict mitigation (15)	STE, Big Life, ATE, WWF, CAK*, LWF, AWF		STE; Biglife; ATE; WWF; AWF?; CAK; LWF

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
Create a multi-stakeholder HEC working group coordinated by KWS (already exists under some county conservation units) (10)	KWS*, Big Life, STE, Counties, KWCA*, Ministry of Agriculture, community leaders, ATE, NRT, Lewa, Borderland, DSWT, ACC		

Group 4: Prioritized Actions and Details on Coordination and support

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
Create more synergy and cross-sectorial partnerships with government agencies at county and national levels (30)	KWS; CAK; NRT, KEF, Wildlife Direct		KWS – Wildlife Governance and Linkages; CAK;NRT with county govt.
Rebuild the capacity of KWS elephant program (e.g., internship, standardized & institutional training (21) in partnership with NGO's (10)	KWS; STE; IFAW		KWS; STE; IFAW
Help build capacity within KWS in partnership with NGOs (10)	KWS;STE;IFA W		KWS;STE;IFA W
Create a secretariat to support the elephant program coordinator (13)	EEC*; KWS		
Restructure/ reconstitute area management committees (incl. trans-boundary) (13)	Communities; EEC; KWS		
Appoint a species champion/ liaison officer in each region/county (8)	EEC*- KWS*; County; Tsavo		Rhino Ark; Tsavo Trust;

Action (# votes received)	Who should be involved? *Lead	Geographic areas to implement first?	Who is already working on action?
	Trust; Lewa		Lewa;
Create a database on initiatives, players (NGOs), level of funding and gaps (8)	KWS;AWF;CA K*		