STATUS OF ELEPHANT POPULATIONS, LEVELS OF ILLEGAL KILLING AND THE TRADE IN IVORY: A REPORT TO THE CITES STANDING COMMITTEE

Introduction

Resolution Conf.10.10 (Rev. CoP17) on *Trade in elephant specimens*, in paragraph 11, directs the Secretariat, pending the necessary external funding, to:

a) *report on information and analyses provided by MIKE and ETIS at each meeting of the Conference of the Parties and, subject to the availability of adequate new MIKE or ETIS data, at relevant meetings of the Standing Committee; and, in collaboration with TRAFFIC as appropriate, provide other reports, updates or information on MIKE and ETIS as required by the Conference of the Parties, the Standing Committee, the MIKE and ETIS Technical Advisory Group (TAG) or Parties;*

b) *prior to relevant meetings of the Standing Committee, invite the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) to provide an overview of trade in elephant specimens as recorded in the CITES database; the IUCN Species Survival Commission (IUCN/SSC) African and Asian Elephant Specialist Groups to submit any new and relevant information on the conservation status of elephants, pertinent conservation actions and management strategies; and African elephant range States to provide information on progress made in the implementation of the African Elephant Action Plan; and*

c) *on the basis of the information specified in paragraphs a) and b) above, recommend actions for consideration by the Conference of the Parties or the Standing Committee;*

This is the sixth report prepared by the entities for the CITES Standing Committee, with previous reports having been provided for SC61 (Geneva, August 2011), SC62 (Geneva, July 2012), SC65 (Geneva, July 2014), SC66 (Geneva, January 2016) and SC69 (Geneva, November 2017).

African elephants (*Loxodonta africana*): Status

This section has been prepared by the IUCN/SSC African Elephant Specialist Group (AfESG).

The AfESG provides technical expertise and advice to governments, NGOs, academic institutions and individuals in support of conservation and management of the African elephant. As a critical component of this mandate, the AfESG maintains the African Elephant Database (AED), the formal repository for geo-spatial information on the numbers and distribution of the species. It also publishes the African Elephant Status Report (AESR). Full status reports were published in 1995, 1998, 2002, 2007 and 2016 and provisional updates were released online for 2012 (in 2013) and 2013 (in 2015).

All populations of African elephant have been listed on CITES Appendix I since 1989, except for four national populations that were transferred to Appendix II (Botswana, Namibia and Zimbabwe in 1997, and South Africa in 2000). The African elephant is listed as Vulnerable (A2a ver 3.1) in the IUCN Red List (Blanc, 2008[1]). The AfESG's Red List Authority is currently updating the 2008 Red List assessment of the African elephant as part of IUCN's Global Mammal Assessment, which will be the most comprehensive examination of elephant population and range data across the continent to date. It is anticipated that a draft assessment against the Red List criteria will be submitted to IUCN for review by October 2018.

Continental overview

The principal findings of the African Elephant Status Report (Thouless et al. 2016[2]), which was the first full status report for the African elephant in almost a decade, were summarised in the Annex to document SC69

[1] *Blanc, J. 2008. Loxodonta africana. The IUCN Red List of Threatened Species 2008: e.T12392A3339343. http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T12392A3339343.en.*

[2] C.R. Thouless, H.T. Dublin, J.J. Blanc, D.P. Skinner, T.E. Daniel, R.D. Taylor, F. Maisels, H. L. Frederick and P. Bouché (2016). African Elephant Status Report 2016: an update from the African Elephant Database. Occasional Paper Series of the IUCN Species Survival Commission, No. 60 IUCN / SSC Africa Elephant Specialist Group. IUCN, Gland, Switzerland. vi + 309pp

Doc. 51.1. The report identified 37 African elephant range States with a known and possible elephant range of over 3.1 million km^2; surveys indicated a total population of 415,428 (± 20,111) elephants, with an additional 117,127 to 135,384 elephants in areas not systematically surveyed. The report also revealed that Africa's elephant population has seen the worst declines in 25 years, with a loss of approximately 111,000 elephants over the ten-year period 2006-2015. A preliminary list of African elephant surveys conducted since the cut-off date for inclusion in AESR 2016 (31st December 2015) is included in Table 1.

Table 1. African elephant surveys conducted since 1st January 2016 (as per information available to AfESG, 26 June 2018 – Note: incomplete and strictly preliminary).

COUNTRY	DATE	AREA
Botswana		
	2016	Okavango Panhandle
	2017	Okavango Panhandle
Chad		
	2018	Zakouma National Park
Congo		
	2016	Odzala National Park
Côte d'Ivoire		
	2016	Comoé National Park
Kenya		
	2016	Mt Kenya Forest
	2016	Mau Forest Complex
	2017	Tsavo Ecosystem
	2017	Aberdares Conservation Area
	2017	Masai Mara and surrounding areas
	2017	Laikipia Samburu
	2017	Marsabit
	2017	Meru National Park
Mozambique		
	2016	Gorongosa National Park
	2017	Gorongosa National Park
Tanzania		
	2017	Mkomazi National Park
Zambia		
	2017	Sioma Ngwezi National Park
Zimbabwe		
	2016	Shangani Ranch
	2017	Save Valley Conservancy

Asian elephants (*Elephas maximus*): Status, threat and conservation actions

This Section has been prepared by the IUCN/SSC Asian Elephant Specialist Group (AsESG).

The Asian Elephant Specialist Group (AsESG) is a global network of specialists on Asian Elephants (*Elephas maximus*) and provides technical support to governments and others on long-term conservation of Asian elephants. The overall aim of the AsESG is to promote the long-term conservation of Asia's elephants and, where possible, the recovery of their populations to viable levels. This report provides an update since the report submitted to the 69th Standing Committee (SC69 Doc.51.1 (Annex) pp. 8 – 12).

The current wild distribution of Asian elephants, numbering between 44,281 and 49,731, is in 13 countries across South and Southeast Asia (IUCN AsESG 2016, unpublished). It occurs in Bangladesh, Bhutan, India, Nepal, and Sri Lanka in South Asia and Cambodia, China, Indonesia (Kalimantan and Sumatra) Lao People's Democratic Republic (PDR), Malaysia (Peninsular Malaysia and Sabah), Myanmar, Thailand, and Vietnam in South-east Asia. Feral populations occur on some of the Andaman Islands (India). All populations of Asian elephants are included in CITES Appendix I, and the global status of the species in the IUCN Red List remains Endangered (A2c; ver 3.1; Choudhury et al., 2008). Sumatran Elephants (*E. m. sumatranus*) are listed as Critically Endangered (A2c; ver 3.1; Gopala et al., 2011).

The major threats to the Asian elephant continue to be habitat loss, degradation and fragmentation to cater to the needs of a growing economy and increasing human population and human-elephant conflict (www.asesg.org/PDFfiles/2017/AsERSM%202017_Final%20Report.pdf). Cases of poaching has increased in Myanmar[3,4,5] and Vietnam[5] and trade of live elephants also reported in Myanmar, Cambodia, India and Lao PDR.

Threats, Conservation Strategies and Action Plan

The 9th meeting of the IUCN/SSC Asian Elephant Specialist Group (AsESG) took place in Bangkok, Thailand on 25–27 April 2018. A number of issues concerning elephant conservation were discussed and possible solutions identified. Each Range State presented on the threats and conservation status of elephants in their country. The meeting also discussed the actions taken on decisions agreed during the 2nd Asian elephant range States meeting held in Jakarta, Indonesia in April 2017 and the conservation initiatives undertaken by each Range State since then. The report of the 2nd Asian elephant range States meeting can be downloaded at
www.asesg.org/PDFfiles/2017/AsERSM%202017_Final%20Report.pdf

To address the various challenges confronting elephant conservation in Asia, the AsESG plans to develop protocols in the form of guidelines or manuals to guide the management of specific matters in an effective and scientific manner. The following Working Groups were constituted in August 2017 to develop:

- guidelines for rehabilitation of captive elephants in the wild as possible re-stocking option;
- a manual for the effective management and care of captive elephant in musth;
- guidelines for welfare and use of elephants in tourism;
- guidelines for creating artificial water holes in elephant habitats;
- a plan for mapping the distribution of Asian elephants in range States; and
- human-elephant conflict guidelines

The progress made by these Working Groups was discussed during the 9th meeting of the AsESG in Bangkok and the products are expected to be finalised by September 2018.

As indicated in the SC69 report, an issue of major concern is the wild elephant population in Vietnam, which is facing a very real extinction threat. The population size has declined to 104 – 132 from an estimated 1,500 – 2,000 in the 1980s. The AsESG Chair constituted a Working Group in August 2017, which presented, at the 9th meeting of the AsESG, a road map for the conservation of elephants in Vietnam, including listing the Vietnam population as Critically Endangered. The feedback received at the AsESG meeting will be considered and incorporated, as appropriate, and the plan will be finalised by September 2018.

The 9th meeting of the AsESG also discussed the involvement of AsESG members to strengthen the MIKE Programme in Asia and a Working Group was established to facilitate collaboration. The meeting also discussed the illegal trade in elephants and elephant parts, the possibility of developing a DNA-based registration system for captive Asian elephants, research relating to the management of elephant endotheliotropic herpes virus, as well as influencing international transportation policy in favour of more wildlife-friendly roads.

Elephant conservation action plans

Reiterating the need to have National Elephant Conservation Action Plans (NECAP) for all the 13 range States, the AsESG offered to assist countries to develop these action plans. To facilitate this process, the Sumatra and Sabah Working Groups were formed by AsESG in August 2017. The Working Group is assisting the Ministry of Environment and Forestry, Indonesia and Sabah Wildlife Department in developing the Action Plans and the draft plans were presented during the AsESG meeting in Bangkok. Myanmar and Bangladesh have recently developed NECAPs and Peninsular Malaysia, Nepal, Vietnam and Sri Lanka already have plans. China, Cambodia and Thailand have draft plans and India, Bhutan and Lao PDR will be developing their plans. Separate Working Groups of the AsESG were formed to assist these three countries.

---

[3] *CITES/IUCN (2016). Illegal Trade in Live Asian Elephants: a review of current legislative, regulatory, enforcement, and other measures across range States (CITES CoP17. Doc. 57.1 Annex 5)*

[4] *Elephant Family (2018): SKINNED The growing appetite for Asian Elephants*

[5] *2nd Asian elephant range States Meeting report. www.asesg.org/PDFfiles/2017/AsERSM%202017_Final%20Report.pdf*

Since the SC69 report, the influx of Rohingya refugees due to political instability in Rakhaine state of Myanmar to Bangladesh has gripped the world both from a humanitarian point of view as well as a wildlife point of view. More than 700,000 people moved in from Myanmar to the refugee camp in Kutupalong Camp, Cox's Bazar, Bangladesh within two weeks in August 2017. This, apart from affecting the life of the people migrating from Myanmar, has also severely impacted the elephant population and its habitat in Bangladesh. This has created an unprecedented situation in Bangladesh for the people and the biodiversity of the area. People have taken refuge in the natural forest and the elephant corridor. A new Rohingya refugee camp has been set up in the middle of this corridor, which is used by about 50 elephants to move between Myanmar and Bangladesh (IUCN Bangladesh). The blocking of the corridor has further increased human-elephant conflict in the region and at least 14 Rohingya refugees lost their lives between September 2017 and April 2018 due to elephants.

IUCN Bangladesh, in collaboration with Bangladesh Forest Department and with support from the United Nations High Commissioner for Refugees (UNHCR), has taken on an assignment to understand the impact of elephants on the Rohingya refugee camp and vice versa and identify possible mitigation measures (short and long term). The team is working in consultation with AsESG members, especially from Bangladesh, and based on its initial assessment has suggested the setting up a series of watch towers. An elephant response team is being trained to detect and drive away elephants. The issue was discussed during the AsESG meeting in Bangkok on 25-27th April 2018 and a Working Group was formed to assist the Bangladesh Forest Department and IUCN Bangladesh to prepare a plan to minimize the impact of Rohingya refugees on elephant habitat and human-elephant conflict in the region.

Asian elephant population estimates

The AsESG established a working group to assist in the mapping of the distribution of Asian elephant populations. The lack of reliable methods for population and distribution estimation is often a challenge when designing long-term conservation strategies for elephants in Asia. As reported to SC69, the estimate of about 44,281 – 49,731 elephants (Table 1) is based on a group exercise with range country officials and AsESG members during the IUCN AsESG members' meeting held in India in November 2016 (IUCN AsESG 2016, unpublished). Only 6% of the total was estimated with a method that stands up to scientific scrutiny and can be termed reliable. Over 80% of the reported numbers are possible estimates (definitive evidence of elephants but methods not scientifically rigorous). 10–13% of the reported numbers seem to be doubtful given that no actual field surveys have taken place and they are based solely on informed guesses made from a few signs encountered, or guestimates based on interviews or conversations with local communities.

Collaboration between AsESG and the MIKE Programme

A workshop of technical experts from Asia was held with AsESG and the MIKE Programme representatives in Bangalore on 25 September 2017. The meeting was chaired by Dr Vivek Menon, Chair of the AsESG, and attended by seven other AsESG members as well as the MIKE sub-regional support unit in Asia and representatives from the MIKE Central Coordination Unit (CCU). Based on the discussions during the workshop, amendments to the MIKE elephant carcass data sheets were proposed to adapt to the situation in Asia. As an outcome of this meeting, the Chair of the AsESG constituted an AsESG Working Group to provide suggestions on strengthening the synergies between the MIKE Programme and the AsESG.

A workshop was also held on 6 October 2017 with the national and site-level focal points for MIKE sites of India at the Ministry of Environment Forests & Climate Change, New Delhi. This was the 2nd meeting of MIKE site focal points from India and was also attended by a representative from the MIKE CCU, experts from AsESG and was chaired by DG (WL) MoEFCC and the Country Representative for India from IUCN. The MIKE elephant carcass data sheets were presented to the focal points, and their feedback was incorporated. The MIKE sites recommitted to providing data to MIKE and agreed on timelines for sharing the data. The focal points also suggested including a greater component related to human-elephant conflict, which was welcomed by the IUCN office.

Monitoring the Illegal Killing of Elephants

This Section has been prepared by the CITES Secretariat.

Levels of and trends in illegal killing of elephants in Africa

This section provides an update since the 69th meeting of the Standing Committee (Geneva, November 2017). The report to the SC69 (SC69 Doc. 51.1 Annex) provided a trend analysis that included the data received up to 1 August 2017. The analysis presented in this document includes an additional 1,602 records of elephant

carcasses encountered in the course of 2017, which were received from 40 sites in Africa. The same methodology as for previous analysis for the Conference of Parties and the Standing Committee was used to determine the level of and trends in illegal killing of elephants.

The CITES programme for Monitoring the Illegal Killing of Elephants, commonly known as MIKE, was established by the Conference of the Parties (CoP) to CITES at its 10th Meeting (Harare, 1997) in accordance with the provisions in Resolution Conf. 10.10 (Rev. CoP17) on Trade in elephant specimens. The MIKE Programme is managed by the CITES Secretariat under the supervision of the CITES Standing Committee. Since implementation began in 2001, the operation of the MIKE Programme in Africa has been possible thanks to the generous financial support of the European Union.

MIKE aims to inform and improve decision-making on elephants by measuring trends in levels of illegal killing of elephants, identifying factors associated with those trends, and building capacity for elephant management in range States. MIKE operates in a large sample of sites spread across elephant range in 30 countries in Africa and 13 countries in Asia. There are some 60 designated MIKE sites in Africa, which together hold an estimated 30 to 40% of the African elephant population, and 27 sites in Asia.

An additional 7 voluntary MIKE sites were nominated by countries in southern Africa (one in Angola, one in Malawi, four in Zambia and one in Zimbabwe). The nominations for the following sites were considered by the MIKE-ETIS Technical Advisory Group (TAG) for inclusion in the MIKE network, and supported:

- Luengue-Luiana National Park (Angola)
- Majete Wildlife Reserve (Malawi)
- Lower Zambezi National Park (Zambia)
- North Luangwa National Park (Zambia)
- Kafue National Park (Zambia)
- Sioma Ngwezi National Park (Zambia)
- Manapools/Sapi Conservation Area (Zimbabwe)

MIKE data is collected by law enforcement and ranger patrols in the field and through other means in designated MIKE sites. When an elephant carcass is found, site personnel try to establish the cause of death and other details, such as sex and age of the animal, status of ivory and stage of decomposition of the carcass. This information is recorded in standardized carcass forms, details of which are then submitted to the MIKE Programme. A database of more than 17,783 carcass records has been assembled to date, providing the most substantial information base available for making a statistical analysis of the levels of illegal killing of elephants.

MIKE evaluates relative poaching levels based on the Proportion of Illegally Killed Elephants (PIKE), which is calculated as the number of illegally killed elephants found divided by the total number of elephant carcasses encountered by patrols or other means, aggregated by year for each site. Coupled with estimates of population size and natural mortality rates, PIKE can be used to estimate numbers of elephants killed and absolute poaching rates.

While PIKE provides a measure of poaching trends, it may be affected by several potential biases related to data quality, reporting rate, carcass detection probabilities, variation in natural mortality rates and other factors, and hence results need to be interpreted with caution.

Trend analysis for 2017

Figure 1A shows empirically derived time trends in PIKE at the continental level for the reporting African MIKE sites, with 90% confidence intervals. The chart shows a steady increase in levels of illegal killing of elephants starting in 2006, peaking in 2011, and leveling off and thereafter following a downward trend. The PIKE level shows a further slight decline in 2017 over 2016, but remains of concern; that is, above a PIKE value of 0.5, more of the elephant deaths reported are attributed to illegal killing than to natural causes.

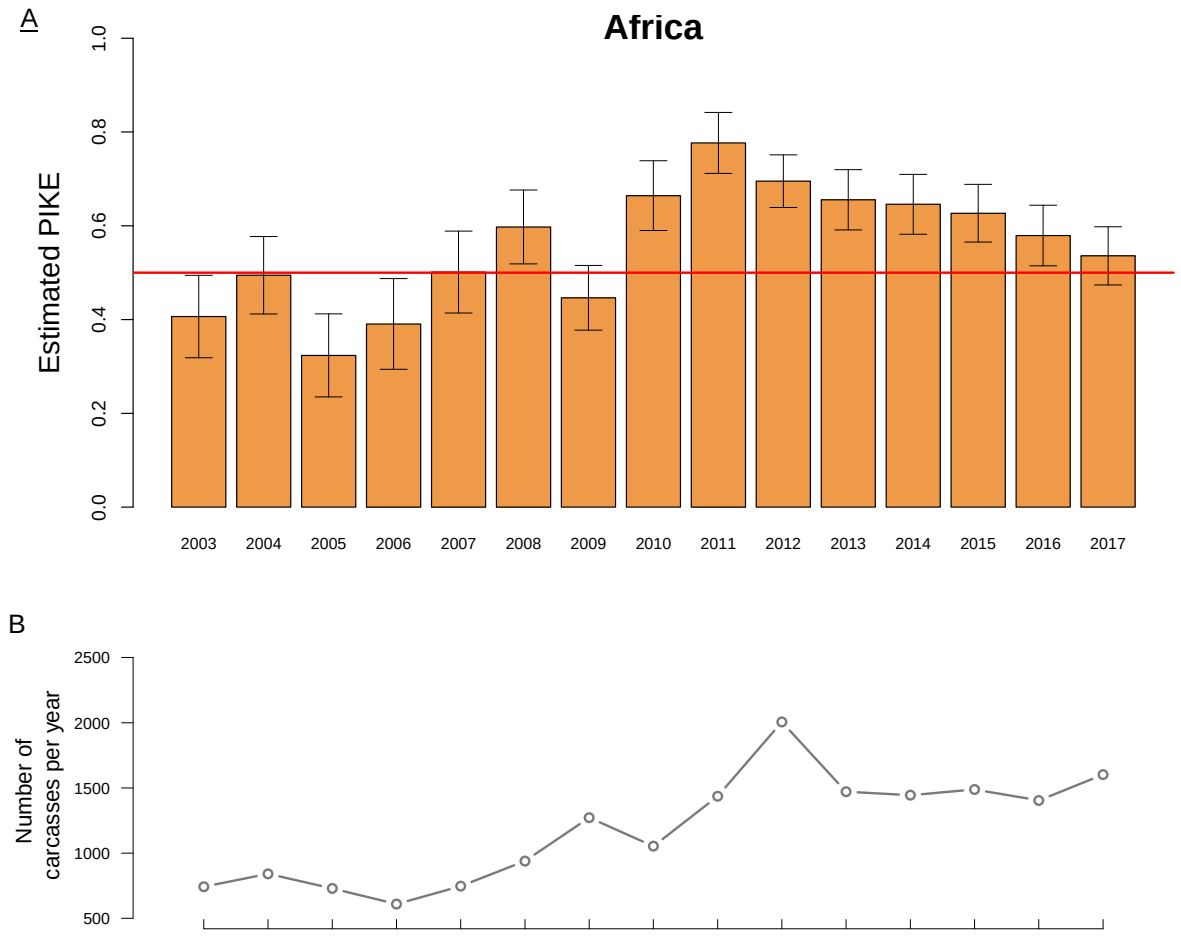


Figure 1. A) PIKE trend in Africa with 90% confidence intervals, based on 17,783 *reports of elephant carcasses (illegally killed or otherwise) reported for the period 2003-2017. PIKE levels above the horizontal line at 0.5 (i.e. where half of dead elephants found are deemed to have been illegally killed) are considered cause for concern. B) The total number of carcasses reported by year, irrespective of cause of death. The total number of carcasses records reported in 2017 is 1602.*

An additional 1,602 records of elephant carcasses encountered in the course of 2017 were received from 40 sites in Africa. The number of reporting sites has increased from 36 sites in 2016 to 40 in 2017, with 198 more elephant mortality records provided in 2017 than 2016 (see Fig. 1B). The data set used for this analysis consists of 17,783 records of elephant carcasses found between 2003 and the end of 2017 at 53 MIKE sites in 28 range States in Africa, representing a total of 586 site-years.

B)

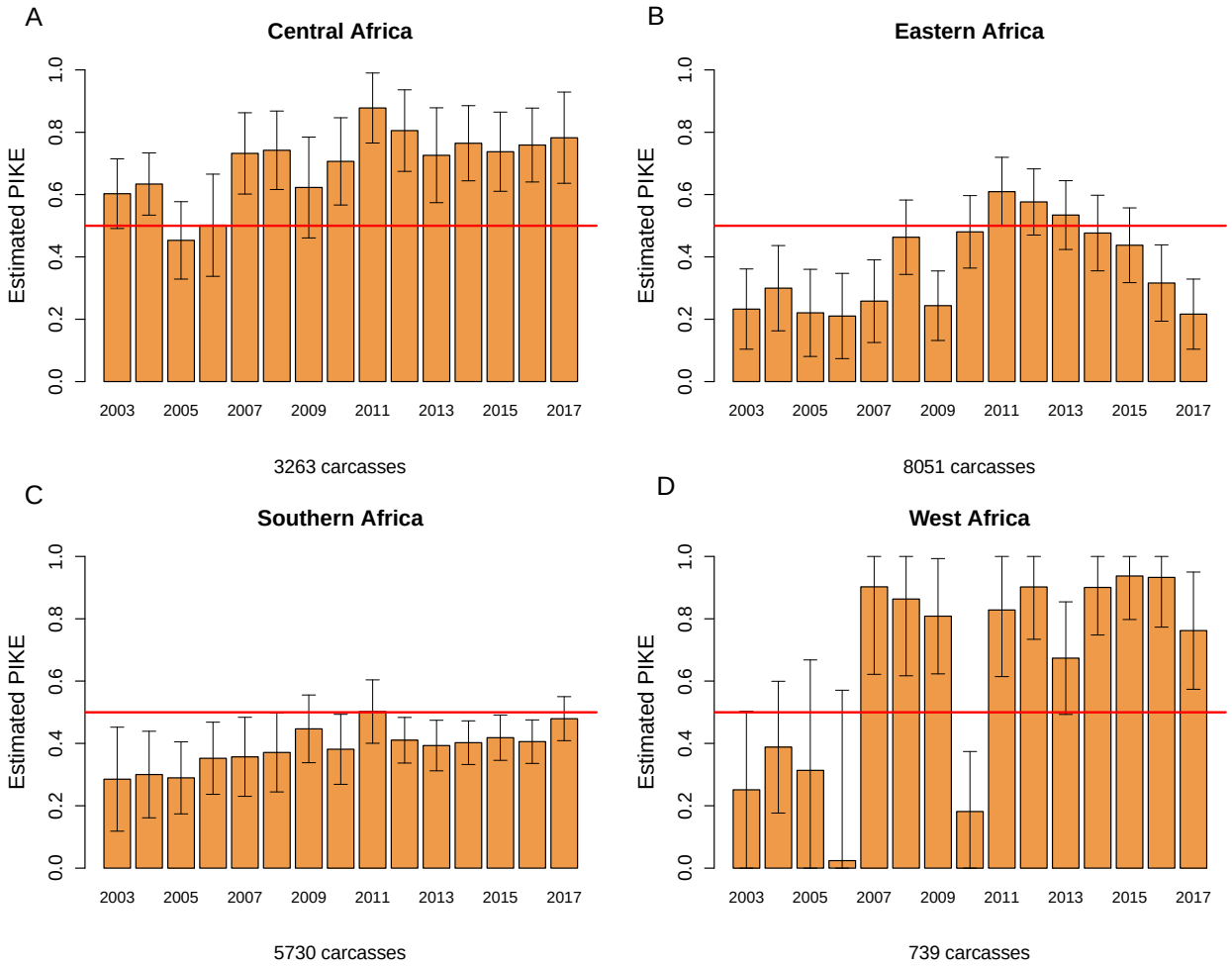


Figure 2. Subregional PIKE trends with annual 90 % confidence intervals (A – D). The total numbers of carcasses on which the graphs are based are shown at the bottom of each graph. In 2017, the number of sites that reported from Central, Eastern, Southern and West Africa were 8, 13, 10 and 9 respectively.

The subregional PIKE estimate for **Eastern Africa** declined from approximately 0.32 in 2016 to 0.22 in 2017 (Fig. 2B). As in previous years, the two largest contributors to the total number of carcass records in the subregion are the Tsavo Conservation Area (Kenya) and Samburu-Laikipia (Kenya) MIKE sites, which in 2017 together made up approximately 82% percent of all carcass records received from the subregion. The large contribution of records and declining PIKE values at both sites may largely influence the subregional trend. Site-level PIKE estimates for Tsavo Conservation Area declined from 0.22 in 2016 to 0.11 in 2017, and in Samburu-Laikipia from 0.40 in 2016 to 0.32 in 2017.

The total number of carcasses, illegally killed or otherwise, reported in Tsavo Conservation Area increased from 170 in 2016 to 351 in 2017; a similar trend is observed in Samburu-Laikipia, with an increase from 145 carcasses in 2016 to 269 in 2017. The 2016-2017 drought in Kenya, which began in October–December 2016, has affected the northwest and southeast parts of the country, which include the Samburu-Laikipia MIKE site and the Tsavo Conservation Area respectively. It is reported that in these areas rains failed, and temperatures were unusually high (Uhe et al. 2017). Such conditions may have increased the natural elephant mortality rate due to additional drought related deaths and may also have increased the detection rate of carcasses, resulting in a higher number of carcass sightings.

The number of illegally killed elephants reported in Tsavo Conservation Area remained relatively unchanged from 37 in 2016 to 38 in 2017 and in Samburu-Laikipia it increased from 58 in 2016 to 87 in 2017. However, even though the number of illegally killed elephants remained similar or increased, the PIKE estimates decreased at both sites. This can be explained by the higher total number of elephant carcasses reported at each site. In other words, the site-level decline in PIKE estimate in Tsavo Conservation Area and Samburu-Laikipia for 2017 may be as a result of increased natural mortality as a result of drought, rather than a change in the number of illegally killed elephants.

A similar effect was pointed out at CoP15, with Tsavo and Samburu-Laikipia sites in Kenya suffering from severe drought between 2008 and 2009, potentially accounting for the observed drop in PIKE in 2009 (Fig.

2b). PIKE is likely to be biased downwards if the total carcass count is raised because of adverse environmental conditions, such as drought (Burn et al. 2011).

The subregional PIKE estimate for **Southern Africa** increased from approximately 0.41 in 2016 to 0.48 in 2017 (Fig. 2C). Several MIKE sites in the region showed an increase in PIKE levels from 2016. Chobe National Park (Botswana) reported zero illegally killed elephants in 2016, and 22 in 2017, which increased its PIKE value from zero to approximately 0.21. The PIKE value increased from 0.27 in 2016 to 0.39 in 2017 in Kruger National Park (South Africa), where the number of illegally killed elephants increased from 46 to 67. A number of other sites in the region with sufficiently large carcass sample sizes – 20 or more carcasses per year – also showed a slight increase in PIKE from 2016 to 2017. This includes South Luangwa National Park (Zambia), where PIKE increased from 0.59 in 2016 to 0.66 in 2017, and Niassa Game Reserve (Mozambique) where PIKE increased from 0.93 in 2016 to 0.94 in 2017. At Niassa Game Reserve, the number of illegally killed elephants increased from 92 in 2016 to 124 in 2017. The increase in PIKE in the subregion may be due largely to an increase in site-level PIKE values from Chobe National Park (Botswana) and Kruger National Park (South Africa) and the relatively unchanged, but high values, of PIKE at the other sites in particular Niassa Game Reserve (Mozambique).

The subregional trend in **Central Africa** remains concerningly high, with an average PIKE value 0.76 over the last three years (Fig. 2A). In **West Africa**, due to low sample sizes, it is particularly hard to make reliable inference based on the year-on-year trend. With the lowest number of carcasses reported (739 over 15 years, see Fig. 2D), West Africa continues to be a cause for concern in terms of data quantity and quality, making reliable inference about trends impossible for the subregion. However, PIKE is concerningly high for the sites where reporting is being done.

While poaching levels seem to show a continuously downward trend since 2011 at the continental scale; PIKE remains above the likely sustainability threshold with the overall poaching trend in 2017 suggesting more elephants die from poaching than from natural causes. Findings from targeted carcass surveys and better regional demographic data may help make a better, more quantifiable assessment of the status of elephant populations in MIKE sites, subregions and across Africa.

Levels of and trends in illegal killing of elephants in Asia

Information on trends in levels of illegal killing of elephants in Asia, based on data covering the period ending on 31 December 2015 was provided in the report to SC69 in document SC69 Doc 51.1 Annex.

The implementation of MIKE in Asia has not benefited from consistent long-term support, as has MIKE implementation in Africa, which has been receiving generous financial support from the European Union since 2001. Fortunately, the European Union is now providing financial support to the implementation of MIKE in Asia through the Asia Wildlife Enforcement and Demand Management Project. This has facilitated the re-launch of the MIKE programme in the region and the sub-regional support units in South Asia and South East Asia are engaging countries to obtain information for 2016 and 2017 to be included in the analysis for the report to the 18th Conference of the Parties to CITES scheduled to take place in Colombo, Sri Lanka in May 2019.

A MIKE Regional meeting took place on 28 April 2018 in Bangkok. This meeting was attended by all the range States in Asia and provided an opportunity to share information relating to their monitoring activities, challenges experienced and the role the MIKE programme could play in assisting them moving forward. A key issue of concern raised by Myanmar is the illegal killing of Asian elephants for their skins. Elephant carcasses have increasingly been found skinned for a new trade in elephant skin and its derived products. This type of poaching is indiscriminate, with all elephants targeted regardless of sex or age (Elephant Family, 2018).

References

Blanc, J. (2008). Loxodonta africana. The IUCN Red List of Threatened Species 2008: e.T12392A3339343. http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T12392A3339343.en. Downloaded on 31 July 2017.

Burn RW, Underwood FM, Blanc J (2011) Global Trends and Factors Associated with the Illegal Killing of Elephants: A Hierarchical Bayesian Analysis of Carcass Encounter Data. PLoS ONE 6(9): e24165. https://doi.org/10.1371/journal.pone.0024165

C.R. Thouless, H.T. Dublin, J.J. Blanc, D.P. Skinner, T.E. Daniel, R.D. Taylor, F. Maisels, H. L. Frederick and P. Bouché (2016). African Elephant Status Report 2016: an update from the African Elephant Database.

Occasional Paper Series of the IUCN Species Survival Commission, No. 60 IUCN / SSC Africa Elephant Specialist Group. IUCN, Gland, Switzerland. vi + 309pp

Elephant Family (2018). SKINNED – The growing appetite for Asian Elephants. London, U.K. http://elephant-family.org/wp-content/uploads/2018/04/ElephantFamily_Elephant_Skin_Report.pdf

John R. Poulsen, Sally E. Koerner, Sarah Moore, Vincent P. Medjibe, Stephen Blake, Connie J. Clark, Mark Ella Akou, Michael Fay, Amelia Meier, Joseph Okouyi, Cooper Rosin, Lee J.T. White, 2017. Poaching empties critical Central African wilderness of forest elephants, *Current Biology*, *Volume 27, Issue 4*. Pages R134-R135, ISSN 0960-9822, http://dx.doi.org/10.1016/j.cub.2017.01.023.

Wittemyer G, Northrup JM, Blanc J, Douglas-Hamilton I, Omondi P, Burnham KP. Illegal killing for ivory drives global decline in African elephants. Proc Natl Acad Sci. 2014; 111: 13117–13121. https://doi.org/ 10.1073/pnas.1403984111 PMID: 25136107

Uhe, P., Philip, S., Kew, S., Shah, K., Kimutai, J., Mwangi, E., van Oldenborgh, G. J., Singh, R., Arrighi, J., Jjemba, E., Cullen, H. and Otto, F. (2017), Attributing drivers of the 2016 Kenyan drought. *Int. J. Climatol.* doi:10.1002/joc.5389, https://reliefweb.int/report/kenya/drought-kenya-2016-2017

Legal trade in ivory

This section has been prepared by UNEP-WCMC.

An overview of reported trade in *Loxodonta africana* using CITES annual report data over the period 2015-2016 has been produced by UNEP-WCMC. Trade data for 2017 are not yet available, as the deadline for submission of annual reports to CITES for 2017 is 31 October 2018. Annual reports for the 2015-16 period have not yet been received at the time of writing (July 2018) for Botswana (2015 and 2016), Mozambique (2016), or the United Republic of Tanzania (2016).

Reported legal trade in *L. africana* directly from African range States over the period 2015-2016 principally comprised wild-sourced hunting trophies (including tusks), and skins and skin pieces for commercial purposes. Direct trade in wild-sourced ivory carvings[6] reported by African range states in 2015-2016 was notably lower than in 2014 (38 kg and 89 items reported by exporters 2015-2016 compared to 7,889 kg of ivory carvings reported in 2014).

In total, for 2015 and 2016, African range States reported the direct export of 133 tusks and 12,543 kg of wild-sourced tusks (Table 2 and Table 3); countries of import recorded the import of 752 tusks and 124 kg of tusks. All trade in tusks by weight was from Zimbabwe and primarily reported as hunting trophies (purpose code 'H'); trade in tusks by weight declined by 36% between 2015 and 2016 and remained lower than the levels reported in 2014 (8,206 kg). Trade in tusks reported by number increased three-fold between 2015 and 2016 according to data reported by range States, while the number of tusks reported by importers decreased by 56% (Table 2).

The large discrepancy in the number of tusks reported in trade by African elephant range States compared with the number reported by importing countries (133 compared with 752 tusks, respectively) can in part be explained by differences in reporting: Zimbabwe reported exports primarily by weight, whereas countries of import largely reported trade from Zimbabwe in number of tusks. Additionally, a permit analysis identified some cases where such discrepancies occurred due to year end trade[7], or discrepancies in the term code reported, for example one trading partner reporting trade as 'trophies' while the other reported 'tusks'.

In addition, a total of 653 trophies were reported by exporters and 739 reported by importers 2015-2016 (Table 4).

Table 2. Direct trade in wild-sourced tusks of* Loxodonta africana *from African range States, 2015-2016 (all purposes).*

Exporter	Reported by	2015	2016	Total

[6] *Including trade reported as ivory carvings, jewellery, ivory jewellery and piano keys.*

[7] *Where the exporter reports the permit issued at the end of one year, and the importer reports the transaction having occurred in the next year. This could lead, for instance, to some trade reported in 2015 by exporters that is reported by importing countries in 2016, resulting in discrepancies in both years.*

Botswana	Exporter	NR	NR	NR
	Importer	38	2	40
Cameroon	Exporter	2	2	4
	Importer	12	2	14
Mozambique	Exporter	8	NR	8
	Importer	24	5	29
Namibia	Exporter	0	32	32
	Importer	56	69	125
South Africa	Exporter	21	55	76
	Importer	43	54	97
United Republic of Tanzania	Exporter	2	NR	2
	Importer	9	0	9
Zambia	Exporter	0	11	11
	Importer	18	0	18
Zimbabwe	Exporter	0	0	0
	Importer	321	99	420
Total	**Exporter**	**33**	**100**	**133**
	Importer	**521**	**231**	**752**

NR = No report received at the time of writing (July 2018).
* 'Wild-sourced' includes trade recorded as source 'W', 'U' and without a source specified.
Source: CITES Trade Database, UNEP WCMC, Cambridge, United Kingdom.

*Table 3. Direct trade in wild-sourced** Loxodonta africana *tusks reported by weight (kg) from African range States, 2015-2016 (all purposes), rounded to the nearest kilogram.*

Exporter	Reported by	2015	2016	Total
Zimbabwe	Exporter	7,599	4,944	12,543
	Importer	42	82	124

* 'Wild-sourced' only includes trade recorded as source 'W'. No trade in tusks reported by weight (kg) was recorded as 'U' or without a source specified.

*Table 4. Direct trade in wild-sourced** *sport-hunted*** *trophies of* Loxodonta africana *from African range States, 2015-2016.*

Exporter	Reported by	2015	2016	Total
Botswana	Exporter	NR	NR	NR
	Importer	63	28	91
Cameroon	Exporter	9	2	11
	Importer	14	1	15
Mozambique	Exporter	11	NR	11
	Importer	36	18	54
Namibia	Exporter	82	94	176
	Importer	50	102	152
South Africa	Exporter	102	102	204
	Importer	61	72	133
United Republic of Tanzania	Exporter	1	NR	1
	Importer	12	0	12
Zambia	Exporter	3	5	8
	Importer	2	2	4
Zimbabwe	Exporter	156	86	242
	Importer	137	141	270
Total	**Exporter**	**364**	**289**	**653**
	Importer	**375**	**364**	**739**

NR = No report received at the time of writing (July 2018).
*'Wild-sourced' includes trade recorded as source code 'W' and without a source specified. No trade in trophies was recorded as 'U'.
** 'Sport-hunted trophies' consist of trade in 'trophies' reported as purposes 'H', 'P' and 'T'. This does not include trade in other "trophy items" such as skins, skulls, ears, tails, etc.
Source: CITES Trade Database, UNEP WCMC, Cambridge, United Kingdom

When the number of individual elephants involved in the trade is estimated (by assuming that for the tusks presented in Table 2 two tusks equal one individual and that each trophy presented in Table 4 equals one individual), exports reported by Cameroon and Zimbabwe decreased 2015-2016 (from ten to three individuals and by 45% from 156 to 86 individuals, respectively) while exports reported by Namibia, South Africa and Zambia increased over this period (by 34% from 82 to 110 individuals, by 15% from 113 to 130 individuals and from three to 11 individuals, respectively).

When the declared export quotas for tusks as sport-hunted trophies are compared with exporter-reported and importer-reported data for both tusks and trophies (assuming that one trophy includes two tusks), no exporting range State appears to have exceeded their annual export quotas set in 2015 (Table 5). However, quotas appear to have been exceeded in 2016 by two range States: Botswana and Namibia. For Botswana, the zero quota appears to have been exceeded by 58 tusks (~29 individuals) according to importer reported data only; Botswana's annual report for 2016 was not yet available at the time of writing. In the case of Namibia, the export quota appears to have been exceed by 40 tusks (~20 individuals) according to data reported by Namibia and by 93 tusks (~47 individuals), according to data reported by importers (Table 5).

However, it is important to note that quota excesses for elephant tusks can be difficult to establish due to reporting practices. For example, trade reported as a 'trophy' may contain one, two or no tusks. Tusk tag numbers and additional details provided in annual reports were scrutinised, where possible, to provide further details relating to potential quota excesses. Based on such information, the apparent excess of Botswana's 2016 quota according to importers can be reduced to six tusks (~three individuals) and the apparent excess of Namibia's 2016 quota according to importers can be reduced to 39 tusks (~20 individuals). In the case of trade reported by Namibia, it should be noted that Namibia's annual report is based on permits issued rather than actual trade, meaning that some of the reported exports may not have occurred.

Table 5. Estimated trade in wild-sourced Loxodonta africana *tusks calculated based on the total number of reported tusks combined with an estimate of the number of tusks reported in trade as "trophies"* directly exported by African range States 2015-2016*, *and export quotas for* Loxodonta africana *tusks as sport-hunted trophies 2015-2018 established in compliance with Resolution Conf. 10.10 (Rev. CoP17) on trade in elephant specimens. Potential quota excesses based on the estimated tusks are indicated in bold. Where there was no published quota for tusks as trophies, this is indicated by "-". No trade data is available for 2017-2018. All quantities are reported by number; tusks reported by weight have been excluded from estimates. Only sport hunted trophies*

Exporter		2015		2016		2017	2018
	Reported by	Estimated No. of tusks*	Quota (# tusks)	Estimated No. of tusks*	Quota (# tusks)	Quota (# tusks)	Quota (# tusks)
Botswana	Exporter	NR	-	NR	0	0	-
	Importer	164	-	**58**	0		
Cameroon	Exporter	20	-	6	160	160	-
	Importer	40	-	4	160		
Mozambique	Exporter	30	200	NR	56	38	-
	Importer	96	200	41	56		
Namibia	Exporter	164	180	**220**	180	180	180
	Importer	156	180	**273**	180		
South Africa	Exporter	225	300	259	300	300	300
	Importer	165	300	198	300		
United Republic of Tanzania	Exporter	4	200	NR	200	200	100
	Importer	33	200	0	200		
Zambia**	Exporter	6	160	21	160	160	-
	Importer	22	160	4	160		
Zimbabwe	Exporter	312	1000	172	1000	1000	-
	Importer	595	1000	381	1000		

(reported as purpose 'H', 'P' or 'T') have been included in the estimates; trade in trophy items (i.e. reported as skull, skin etc.) has been excluded.

*Total number of tusks estimated based on the number of tusks reported plus two times the number of trophies reported (with the assumption that one trophy contains two tusks).

**Export quotas for Zambia in 2015, 2016 and 2017 were published for "tusks and other trophies" of a specified number of animals.

NR = No report received at the time of writing (July 2018).

Source: CITES Trade Database, UNEP WCMC, Cambridge, United Kingdom.

Reporting issues

The analysis of hunting trophy data is complicated by the variety of ways in which hunting trophies can be reported. The *Guidelines for the preparation and submission of CITES annual reports*[8] states that all the trophy parts of one animal, e.g. an elephant's two tusks, four feet, two ears and one tail, constitute one 'trophy' if they are exported together on the same permit. However, in practice, many Parties do not follow the *Guidelines* consistently and this can lead to double-counting of trophies. Standardisation in reporting of hunting trophies through application of the *Guidelines*, in particular for species such as *L. africana* where export quotas have been established, is crucial to assessing compliance with the provisions of the Convention. The most recent version of the *Guidelines*, published in January 2017, include further clarifications on the reporting of hunting trophies. Additionally, the updated *Guidelines* provide further clarifications on the reporting of worked ivory, including a new term code for piano keys ("KEY"), to provide additional context to the analysis of trade in worked ivory.

Serial numbers provided within annual reports can provide valuable insight for verification of quota compliance and this information could be collected more systematically through the CITES Trade Database to support CITES implementation. Adoption of electronic permitting and automated transfer of trade data to the CITES Trade Database in near real-time would facilitate this and should be considered as a means for enhancing transparency and traceability for all species with quotas and tagging/marking systems. These compliance considerations may be relevant for continued Standing Committee discussions.

African Elephant Fund (AEF) and implementation of the African Elephant Action Plan (AEAP)

This section has been prepared and submitted by Ghana as the Chair of the African Elephant Fund Steering Committee in collaboration with the United Nations Environment Programme (UN Environment) as the host of the fund and the Secretariat of the African Elephant Fund Steering Committee. This report is an update by the AEFSC on the implementation of the African Elephant Action Plan (AEAP) and it covers a period between August 2017 and July 2018, prior to SC70. Previous reports submitted to the Standing Committee are contained in documents SC65Doc 42.1 (pp.32-34), SC66Doc47.1 (pp.11-14) and SC69Doc. 51.1 (pp.19-21).

The African Elephant Action Plan was adopted by African elephant range States in March 2010 in the margins of the 15th meeting of the Conference of Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (see document CoP15 Inf. 68). The Twelfth Session of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP12) held in Manila, the Philippines, from 23 to 28 October 2017 endorsed the African Elephant Action Plan as the principal strategy for elephant conservation under CMS, as contained in CMS Resolution 12.19. The rationale for doing this was that African elephants have been listed on CMS Appendix II since 1979 but no strategy document has existed under CMS to conserve the African elephant since 2014. Given that the African Elephant Action Plan addresses all the objectives of CMS and had been agreed by all 37 African elephant range States already, the CMS COP also endorsed it in principle, with the strategy document to follow. The resolution can be accessed on the link https://www.cms.int/en/document/endorsement-african-elephant-action-plan.

The African Elephant Fund (AEF) and the African Elephant Fund Steering Committee (AEFSC) were established in accordance with Decision 14.79 (Rev. CoP15) to support the implementation of the Action Plan.

During this reporting period (between August 2017 and this present meeting), the AEFSC held the 9th and the 10th AEFSC meeting. The 9th AEFSC meeting was an informal meeting that took place on 29 November 2017, in the margins of the 69th meeting of the Standing Committee. The 10th AEFSC meeting was held in Kasane, Botswana in March 2018. The meeting reviewed the progress in implementation of the projects in support of the Action Plan; assessed 31 project proposals; and approved 17 projects submitted to be funded through the African Elephant Fund.

Membership of the African Elephant Fund Steering Committee

During the 10th AEFSC meeting, elections were conducted for the new Steering Committee for the year 2018 to 2020:

[8] See CITES Notification to the Parties No. 2017/006.

1. *African Elephant range States:*
   a) Chair: Ghana
   b) Vice-chair: Niger
   c) West Africa sub-region: Ghana and Niger
   d) Central Africa sub-region: Chad and Gabon
   e) East Africa sub-region: Kenya and Uganda
   f) Southern Africa sub-region: South Africa and Namibia

2. *Donor States*
   a) The European Commission
   b) Belgium
   c) France

3. *Ex-officio members*
   a) The United Nations Environment Programme (UN Environment).
   b) The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat
   c) The Convention on the Conservation of Migratory Species of Wild Animals (CMS) Secretariat.

Detailed information regarding the Steering Committee can be accessed using the link http://www.africanelephantfund.org/page/i/members-of-the-steering-committee .

Projects funded from the Fund

Since its inception in 2010, the African Elephant Fund has funded thirty-nine (39) projects in the African elephant range States in support of the implementation of the African Elephant Action Plan. Reports for AEF projects can be accessed using the link http://www.africanelephantfund.org/page/i/range-state-reports.

In addition to the funded projects in Table 1 of document SC69 Doc. 51.1, seventeen more projects were approved for funding during the 10th AEFSC meeting. These projects are listed in Table 6 below:

Table 6: List of projects approved per region at the 10th AEFSC meeting held in Kasane, Botswana on 1 to 3 March 2018. Details of the funded projects can be accessed using the link http://www.africanelephantfund.org/page/i/summary-of-funded-projects

Sub-region	**Beneficiary Country**	**Amount in USD**
Central Africa	Cameroon	$ 145, 816
East Africa	Kenya (3), Uganda (2), Rwanda	$ 474,230
Southern Africa	Malawi (2), Zimbabwe	$ 198,714
West Africa	Benin, Burkina Faso, Niger and Togo, Nigeria (2), Ghana, Guinea, Togo	$ 411,496
All Regions	IUCN	$ 52, 195
Total Funding		**$1,282,451**

In terms of overall funding and expenditure, the total funds received to the African Elephant Fund is USD 3,458,954.53, while the total funds allocated is USD 3,249,458.84.

Funding

In addition to the donor funding received to the Fund as at 5 April 2017 and reported in Table 7 of document SC69 Doc.51.1 (pp20), the Fund has received the following donations:

Table 7: Donor Funding

Donor	**Amount (US Dollars)**
Belgium	59,737.16

The Netherlands	142,095.91

Details of the total funding received since the establishment of the African Elephant Fund and as at 13 February 2018 can be accessed on the following link: http://www.africanelephantfund.org/page/i/funding

During the 10th AEFSC, the AEF received pledges for the year 2018. Pledges were made by the Netherlands, Belgium, France and Germany.

The Chair, on behalf of the AEFSC and all the African elephant range States, would like to appreciate and thank the Governments of Netherlands, Germany, France, Belgium, China, United Kingdom, South Africa and the European Commission for contributing the needed financial resources towards implementation of the African Elephant Action Plan and securing the future of the African elephant by protecting and conserving them across its range.

Due to the growing financial needs to implement projects, the development of a resource mobilization strategy has been identified as a priority. During the 10th AEFSC meeting, the Steering Committee agreed to discuss, draft and adopt a long-term-fund-raising strategy for the African Elephant Fund. The AEFSC appeals to Parties, donors, IGOs, NGOs, private sector and philanthropists to support the implementation of these projects by contributing to the Fund.

Visibility of the AEF and AEFSC

The African Elephant Fund launched a report in the margin of the 12th CMS COP in Manila, the Philippines. This report is accessible through the link:
http://wedocs.unep.org/bitstream/handle/20.500.11822/22136/AEF-Strategies Action.pdf?sequence=1&isAllowed=y .

The AEF also produced a triannual newsletter for the year 2018. This newsletter can be access through the link https://spark.adobe.com/page/0pL4ZQmRJWXIh/. In addition, AEF is currently working on a report on projects currently being implemented in the African elephant range States, which will be launched before the end of the year 2018. More information about the African Elephant Fund can be accessed through the website www.africanelephantfund.org.

Next meetings of the AEFSC

During the 10th AEFSC meeting, the AEFSC proposed that Ghana as the new Chair of the AEFSC, should be requested to host the 11th AEFSC meeting. The AEF Secretariat is currently in consultations with Ghana on the modalities of hosting the 11th AEFSC meeting.

Conclusions

The Standing Committee is requested to note the progress made by the AEFSC in overseeing the implementation of the AEAP and management of the AEF and call upon governments, donors, IGOs and NGOs to contribute financial resources to the Fund to support the implementation of the AEAP.

Illegal Trade in Elephant Specimens

Overview of seizure data

As of 21 June 2018, there were 28,490 records in ETIS, of which 25,822 represented ivory seizures, whilst the remainder comprised non-ivory elephant products. Figure 3 illustrates the reported number of ivory seizures and the estimated weight of ivory seized as raw unadjusted data in each year from 1989 to 2017. Figure 3 cannot be interpreted as a trend, nor is it suggestive of absolute quantities of ivory seized over time, because of inherent bias in the raw data owing to variable rates of making and reporting seizures to ETIS between and within countries over time.

Figure 3: **Number of ivory seizure cases and estimated weight of ivory by year, 1989 - 2017** *(ETIS raw data, 21 June 2018)*

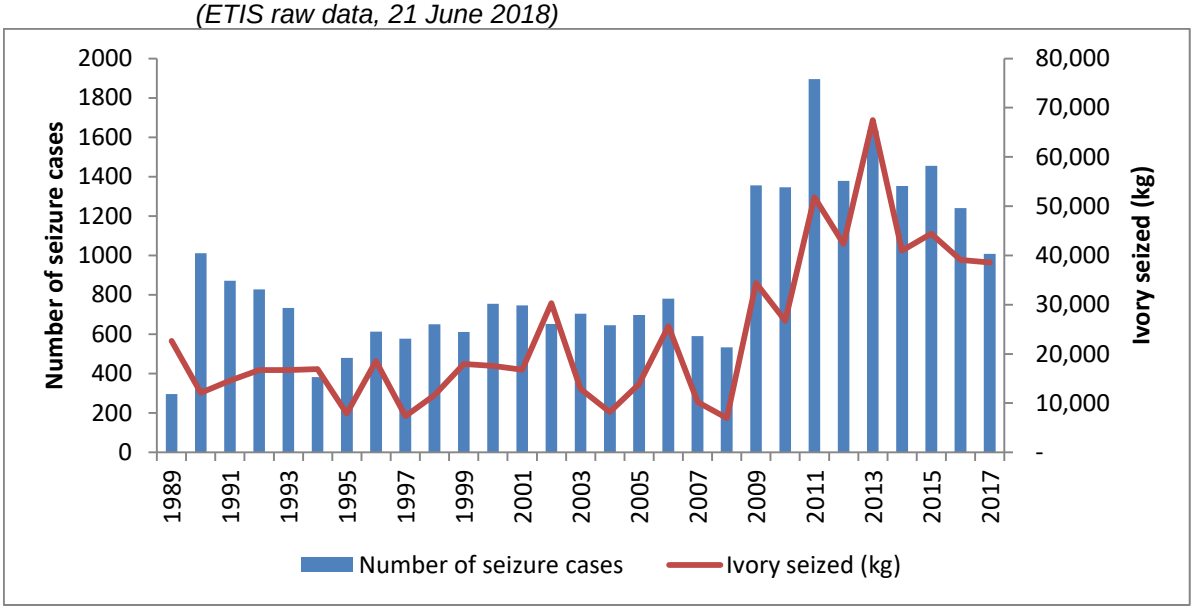


Table 8 records the number of ivory seizures reported by the CITES Parties and other non-Parties to ETIS in the period 2007 through 2017. The number of ivory seizure cases reported to ETIS for 2017 totaled 1,008, which represents nearly a 20% drop from the previous year and a 30% decrease against the 2015 data (Table 8). There are various reasons why 2017 is believed to have fewer reported seizures than would be expected. For example, although TRAFFIC engages in an annual data exchange with the World Customs Organization (WCO), personnel changes at the WCO prevented the exchange from occurring with respect to data for 2017; such data will become available in the future but will not be part of this report nor the analysis presently being conducted for the ETIS report to CoP18. Similar disruption in the provision of data has resulted in a number of countries failing to submit data, (with one such country already indicating that approximately 150 outstanding seizure cases will be sent in the near future but not in time for the CoP18 analysis). For a number of countries which did submit data for this analysis, assessment of open source data suggests that the true number of seizure records could be greater than what has been reported by the relevant CITES Management Authorities. It is very likely that considerably more seizure cases will be made available for 2017 in future iterations of the ETIS trend analysis. These caveats need to be taken into consideration when considering analytical results using the dataset described in this report.

Table 8: **Number of ivory seizure cases reported to ETIS, 2007 – 2017** *(ETIS raw data, 21 June 2018)*

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
AE	9	4	3	1	8	9	7	3	2	9	10	**65**
AF	0	0	0	0	0	0	0	0	0	0	0	**0**
AG	0	0	0	0	0	0	0	0	0	0	0	**0**
AL	0	0	0	0	0	0	0	0	0	0	0	**0**
AM	0	0	0	0	0	0	0	0	0	0	0	**0**
AO	0	0	0	0	2	13	29	5	1	11	2	**63**
AR	0	0	0	0	0	0	0	0	0	0	0	**0**
AT	3	0	1	1	0	0	1	6	3	1	1	**17**
AU	81	81	60	32	45	29	28	23	4	14	10	**407**
AZ	0	0	0	0	0	0	0	0	0	0	0	**0**
BA	0	0	0	0	0	0	0	0	0	0	0	**0**
BB	0	0	0	0	0	0	0	0	0	0	0	**0**
BD	0	0	0	0	0	0	1	0	0	0	0	**1**
BE	8	7	5	29	51	61	27	4	1	2	16	**211**
BF	0	0	0	1	0	0	0	0	0	1	0	**2**

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
BG	0	0	0	0	0	0	0	0	0	0	0	**0**
BH	0	0	0	0	0	0	0	0	0	0	0	**0**
BI	0	1	0	0	0	0	1	0	0	0	0	**2**
BJ	0	0	0	0	0	0	0	2	1	7	6	**16**
BN	0	0	0	0	0	0	0	0	0	0	0	**0**
BO	0	0	0	0	0	0	0	0	0	0	0	**0**
BR	0	0	0	0	0	0	0	0	0	0	0	**0**
BS	0	0	0	0	0	0	0	0	0	0	0	**0**
BT	0	0	0	0	0	0	0	0	0	0	0	**0**
BW	8	14	18	13	15	2	25	12	16	10	19	**152**
BY	0	0	0	0	0	0	0	0	0	0	0	**0**
BZ	0	0	0	0	0	0	0	0	0	0	0	**0**
CA	2	6	0	0	1	5	4	3	0	5	3	**29**
CD	0	0	0	2	0	1	0	1	11	6	2	**23**
CF	0	0	2	2	0	0	0	0	0	1	0	**5**
CG	0	3	0	0	8	0	3	2	3	5	10	**34**
CH	8	6	2	10	6	4	11	3	16	13	4	**83**
CI	0	0	0	0	0	0	4	10	4	2	8	**28**
CL	0	0	0	0	0	0	0	0	0	0	0	**0**
CM	4	6	11	6	13	13	33	22	27	11	9	**155**
CN	90	52	733	707	834	388	433	272	233	142	100	**3,984**
CO	0	0	0	0	0	0	0	0	0	0	0	**0**
CR	0	0	0	0	0	0	0	0	0	0	0	**0**
CU	0	0	0	0	0	0	0	0	0	0	0	**0**
CV	0	0	0	0	0	0	0	0	0	0	0	**0**
CY	0	0	0	0	0	0	0	1	0	0	0	**1**
CZ	0	1	4	0	0	0	0	3	0	6	1	**15**
DE	33	26	60	35	31	60	71	41	37	26	17	**437**
DJ	0	0	0	0	0	0	0	0	0	0	0	**0**
DK	1	1	0	3	2	1	1	0	3	1	1	**14**
DM	0	0	0	0	0	0	0	0	0	0	0	**0**
DO	0	0	0	0	0	0	0	0	0	0	0	**0**
DZ	0	0	0	0	0	0	0	0	0	0	0	**0**
EC	0	0	0	0	0	0	0	0	0	0	0	**0**
EE	1	0	0	0	0	0	0	0	1	0	0	**2**
EG	0	0	0	0	1	3	8	12	3	5	4	**36**
ER	0	0	0	0	0	0	0	0	0	0	0	**0**
ES	0	0	1	24	0	0	3	1	0	3	0	**32**
ET	0	4	5	1	163	111	154	103	100	42	43	**726**
FI	0	0	0	0	0	0	0	0	0	0	0	**0**
FJ	0	0	0	0	0	0	0	0	0	0	0	**0**
FR	19	10	7	25	81	23	46	94	89	62	48	**504**
GA	0	1	1	16	3	3	10	12	15	13	29	**103**
GB	10	7	16	8	31	45	42	31	152	130	0	**472**
GD	0	0	0	0	0	0	0	0	0	0	0	**0**
GE	0	0	0	0	0	0	0	0	0	0	0	**0**
GH	0	0	0	0	0	0	0	0	0	0	0	**0**

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
GM	0	0	0	0	0	0	0	0	0	0	0	**0**
GN	0	0	0	0	0	3	3	0	0	1	0	**7**
GQ	0	0	0	0	0	0	0	0	0	0	0	**0**
GR	0	1	0	0	0	0	0	0	0	0	0	**1**
GT	0	0	0	0	0	0	0	0	0	0	0	**0**
GW	0	0	0	0	0	0	0	0	0	0	0	**0**
GY	0	0	0	0	0	0	0	0	0	0	0	**0**
HK	1	4	6	40	40	56	114	117	130	41	66	**615**
HN	0	0	0	0	0	0	0	0	0	0	0	**0**
HR	0	0	0	0	0	0	0	0	1	0	0	**1**
HU	0	0	1	0	0	0	1	3	1	1	5	**12**
ID	4	2	1	0	0	0	0	3	2	4	3	**19**
IE	0	0	0	0	2	0	0	0	0	0	0	**2**
IL	0	0	0	0	0	0	0	0	0	0	0	**0**
IN	10	5	12	9	5	2	3	13	11	12	29	**111**
IQ	0	0	0	0	0	0	0	0	0	0	0	**0**
IR	0	0	0	0	0	0	0	0	0	0	0	**0**
IS	0	0	0	0	0	0	0	0	0	0	0	**0**
IT	5	3	0	0	0	1	3	1	18	0	4	**35**
JM	0	0	0	0	0	0	0	0	0	0	0	**0**
JO	0	0	0	0	0	0	0	0	0	0	0	**0**
JP	5	6	3	5	2	0	0	7	10	4	3	**45**
KE	27	30	87	59	67	61	56	133	71	111	95	**797**
KG	0	0	0	0	0	0	0	0	0	0	0	**0**
KH	0	0	0	0	0	0	7	5	1	2	1	**16**
KM	0	0	0	0	0	0	0	0	0	0	0	**0**
KN	0	0	0	0	0	0	0	0	0	0	0	**0**
KR	0	0	0	0	1	0	0	0	0	0	0	**1**
KW	0	0	0	0	0	0	0	0	0	0	0	**0**
KZ	0	0	0	0	0	0	0	0	0	0	0	**0**
LA	0	0	0	0	0	0	0	0	1	0	2	**3**
LB	0	0	0	0	0	0	0	0	0	0	0	**0**
LC	0	0	0	0	0	0	0	0	0	0	0	**0**
LI	0	0	0	0	0	0	0	0	0	0	0	**0**
LK	0	0	0	0	0	1	0	1	1	1	3	**7**
LR	0	0	0	0	0	0	0	0	0	0	0	**0**
LS	0	0	0	0	0	0	0	0	0	0	0	**0**
LT	0	0	0	0	0	0	0	0	0	0	0	**0**
LU	0	0	0	0	0	0	0	0	0	0	0	**0**
LV	0	0	0	0	0	0	1	0	0	0	1	**2**
LY	0	0	0	0	0	0	0	0	0	0	0	**0**
MA	0	0	0	0	0	0	0	0	0	0	0	**0**
MC	0	0	0	0	0	0	0	0	0	0	0	**0**
MD	0	0	0	0	0	0	0	0	0	0	0	**0**
ME	0	0	0	0	0	0	0	0	0	0	0	**0**
MG	0	0	0	0	0	0	0	0	0	0	0	**0**
MK	0	0	0	0	0	0	0	0	0	0	0	0

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
ML	0	0	0	0	0	0	1	0	0	0	0	**1**
MM	0	0	0	3	2	1	1	3	5	2	1	**18**
MN	0	0	0	0	0	0	0	0	0	0	0	**0**
MO	0	0	0	1	0	1	2	1	0	0	0	**5**
MR	0	0	0	0	0	0	0	0	0	0	0	**0**
MT	0	0	0	0	1	0	1	0	0	0	0	**2**
MU	0	0	0	0	0	0	0	0	0	0	0	**0**
MV	0	0	0	0	0	0	0	0	0	0	0	**0**
MW	0	0	0	1	8	4	9	6	4	40	35	**107**
MX	0	0	0	0	0	1	0	0	0	0	0	**1**
MY	0	0	0	0	4	3	4	3	7	11	5	**37**
MZ	0	20	0	0	2	2	10	2	7	4	12	**59**
NA	11	14	24	14	25	22	32	19	19	67	51	**298**
NE	0	0	0	0	0	0	0	0	0	0	0	**0**
NG	0	0	0	4	7	2	6	12	8	8	5	**52**
NI	0	0	0	0	0	0	0	0	0	0	0	**0**
NL	29	16	16	5	11	7	8	22	17	24	13	**168**
NO	1	0	0	0	0	1	0	0	0	0	0	**2**
NP	0	0	0	0	0	1	2	1	1	0	1	**6**
NZ	5	2	1	0	7	7	3	9	6	7	7	**54**
OM	0	0	0	0	0	0	0	0	0	0	0	**0**
PA	0	0	0	0	0	0	0	0	0	1	0	**1**
PE	0	0	0	0	0	0	0	0	0	0	0	**0**
PG	0	0	0	0	0	0	0	0	0	0	0	**0**
PH	0	0	2	0	0	0	0	0	0	0	0	**2**
PK	0	0	0	0	0	0	0	0	0	0	0	**0**
PL	0	2	1	0	0	0	0	0	0	0	0	**3**
PT	50	23	0	5	2	1	6	4	8	1	1	**101**
PW	0	0	0	0	0	0	0	0	0	0	0	**0**
PY	0	0	0	0	0	0	0	0	0	0	0	**0**
QA	1	1	0	0	0	0	0	1	1	0	2	**6**
RO	1	0	0	0	0	1	0	2	1	0	0	**5**
RS	0	0	0	0	0	0	0	0	0	0	0	**0**
RU	0	0	0	0	0	0	0	0	0	0	0	**0**
RW	0	0	0	0	0	0	0	1	0	0	0	**1**
SA	0	0	0	0	0	0	0	1	0	0	0	**1**
SB	0	0	0	0	0	0	0	0	0	0	0	**0**
SC	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	3	41	57	56	88	49	46	4	0	0	0	**344**
SE	1	2	0	0	0	0	0	1	0	2	0	**6**
SG	0	0	0	0	0	0	1	3	3	0	1	**8**
SI	0	1	0	0	0	0	0	0	0	0	0	**1**
SK	0	0	0	0	0	0	0	0	0	0	0	**0**
SL	0	0	0	0	0	0	0	0	0	0	0	**0**
SM	0	0	0	0	0	0	0	0	0	0	0	**0**
SN	0	0	0	0	0	0	0	1	0	3	2	**6**
SO	0	0	0	0	0	0	0	0	0	0	0	**0**

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
SR	0	0	0	0	0	0	0	0	0	0	0	**0**
SS	0	0	0	0	0	0	1	0	0	2	0	**3**
ST	0	0	0	0	0	0	0	0	0	0	0	**0**
SV	0	0	0	0	0	0	0	0	0	0	0	**0**
SY	0	0	0	0	0	0	0	0	0	0	0	**0**
SZ	0	0	0	0	0	0	0	0	0	0	0	**0**
TD	1	0	0	0	2	0	0	0	2	1	0	**6**
TG	0	0	0	0	1	1	4	4	2	3	2	**17**
TH	0	1	2	6	3	7	4	12	18	5	10	**68**
TJ	0	0	0	0	0	0	0	0	0	0	0	**0**
TN	0	0	0	0	0	0	0	0	0	0	1	**1**
TO	0	0	0	0	0	0	0	0	0	0	0	**0**
TR	0	0	0	0	0	1	0	0	0	1	0	**2**
TT	0	0	0	0	0	0	0	0	0	0	0	**0**
TW	2	2	2	0	2	2	0	0	3	2	2	**17**
TZ	30	11	27	17	31	91	125	54	54	45	38	**523**
UA	0	0	0	0	0	0	0	0	0	0	0	**0**
UG	5	5	1	0	11	15	21	23	12	22	72	**187**
US	97	72	113	136	196	185	151	157	185	139	100	**1,531**
UY	0	0	0	0	0	0	0	0	0	0	0	**0**
UZ	0	0	0	0	0	0	0	0	0	0	0	**0**
VC	0	0	0	0	0	0	0	0	0	0	0	**0**
VE	0	0	0	0	0	0	0	0	0	0	0	**0**
VN	1	0	6	11	10	5	6	10	12	22	13	**96**
VU	0	0	0	0	0	0	0	0	0	0	0	**0**
WS	0	0	0	0	0	0	0	0	0	0	0	**0**
YE	0	0	0	0	0	0	0	0	0	0	0	**0**
ZA	5	9	24	10	25	27	16	10	25	44	15	**210**
ZM	16	16	11	21	27	23	26	20	57	47	33	**297**
ZW	2	14	29	27	18	23	18	17	29	33	31	**241**
Total	**590**	**533**	**1,355**	**1,346**	**1,895**	**1,378**	**1,634**	**1,352**	**1,455**	**1,241**	**1,008**	**13,787**

Table 9 provides the estimated total weight of ivory represented by the seizures presented in Table 8. Weights have been rounded to the nearest 100 kg because nearly half of the seizure records are received as numbers of pieces by ivory type and need to be calculated on the basis of data that gives both the number of pieces and weight; these calculations are presently under reconsideration in preparation for the CoP18 analysis. Even though 2017 stands at a nine-year low in terms of reported ivory seizure cases, possibly for the reasons described above, the estimated quantity of ivory seized, 38,600 kg, represents only a 1% decrease from the quantity seized in 2016 and a 13% decrease from 2015. However, one exceptionally large seizure of 7,030 kg of ivory made by China (Hong Kong SAR) authorities in July 2017 is responsible for this result, which would otherwise basically mirror the reduction in seizure numbers from previous years. Regardless, given the deficiencies in reporting described above, and the fact that these data are not yet bias-corrected, it would be premature to interpret this result as evidence of a decline in the illegal ivory trade itself.

Table 9: **Total number and estimated rounded weight of ivory seizure cases reported to ETIS, 2007 – 2017** *(ETIS raw data, 21 June 2018)*

Seizures	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number	590	533	1,355	1,346	1,895	1,378	1,634	1,352	1,455	1,241	1,008
Weight	10,200	7,000	34,400	26,700	51,800	42,300	67,500	41,000	44,400	39,100	38,600

Challenges faced in the implementation of ETIS

The reporting of elephant product seizure data to ETIS remains a major concern because the majority of CITES Parties are not reporting to ETIS in a timely manner. Annex 1 of Resolution Conf. 10.10 (Rev. CoP17) clearly directs CITES Management Authorities to:

> *provide information on seizures and confiscations of ivory or other elephant specimens in the prescribed formats … within 90 days of their occurrence.*

If such were the case, all seizure data would be available to ETIS by the end of March of each year. Accordingly, Notification to the Parties No. 2017/074 of 14 December 2017 requested the submission of outstanding ETIS reports for 2017 by 31 March 2018. In fact, 75% of the records reported to ETIS in 2017 were received more than 90 days after the occurrence of the seizure and 40% were received after the deadline established by the CITES Notification. Looking more broadly at the ETIS data, similarly, 75% of the seizure cases reported by government authorities to ETIS in the period 2015 through 2017 were not reported within 90 days of their occurrence, with the average seizure case being reported nearly one year (i.e. 357 days) after the date of occurrence and some records reaching ETIS more than three years after the seizure occurred. The general failure of timely reporting remains a major challenge for the successful operation of the CITES monitoring system for tracking illegal trade in elephant ivory.

Further, for a variety of reasons, a number of important datasets appear incomplete. In Resolution Conf. 10.10 (Rev. CoP17), it is recognised that within a given country the legal mandate to seize elephant products typically lies with a number of different law enforcement authorities, including Customs, police and wildlife officers. Thus, the Resolution calls upon "*CITES Management Authorities, following liaison with appropriate law enforcement agencies*" to report seizures and confiscations of ivory or other elephant specimens for inclusion in ETIS. The Resolution broadly defines seizures as any event "*that takes place in their territories*" and the ETIS data collection form specifically allows for Parties to identify any number of legal offences, such as 'illegal killing', 'export', 'transit', 'import', 'offer for sale', 'sale', or 'possession' when reporting the reason behind individual seizures. In this regard, seizures are not limited to a country's ports of exit or entry, but also cover internal markets, protected areas or any other location within a country. Unfortunately, some Parties only provide Customs data but fail to address elephant product seizure cases that result from law enforcement actions that occur elsewhere within their borders. This is a serious omission, especially as Resolution Conf. 10.10 also calls upon "*all Parties and non-Parties in whose jurisdiction there is a legal domestic market for ivory that is contributing to poaching or illegal trade, take all necessary … enforcement measures*", which certainly includes the prospect of seizing contraband ivory. Even though great effort is made to adjust for bias in the reported seizure data, failure to report seizures serves to obscure the true dimensions of the global illegal ivory trade. To ensure more complete reporting, CITES Management Authorities are encouraged to build effective intra-governmental relationships with all agencies holding legal authority to make elephant product seizures, including those at state and provincial levels, so that all relevant seizure data can be collected and reported to ETIS in a timely manner.

Commentary on data received

<u>Large-scale ivory seizures</u>

The Parties put a particular focus on large-scale ivory seizures in Resolution Conf. 10.10 (Rev. CoP17), recommending that seizures which are 500 kg or more be subjected to forensic analysis to determine the origin of the ivory. Assessing large-scale ivory seizures is also important because they can be a useful indicator concerning the involvement of transnational organized criminal syndicates in illegal movements of ivory. ETIS has tracked large-scale ivory seizures in raw ivory equivalent (RIE) terms since CITES CoP15 in March 2010. RIE expresses the weight of worked ivory products in raw ivory values by accounting for the approximate 30% loss during processing into finished products. Table 10 presents the number and estimated RIE weight of large-scale ivory seizure cases reported to ETIS from 2008 through 2017.

It is worth noting that, for 2017, all reported large-scale seizures occurred in countries participating in the National Ivory Action Plan (NIAP) process, specifically three each in Cameroon and Viet Nam, two in Malaysia, and one each in Cambodia, China (Hong Kong SAR) and Uganda. That year the number of large-scale ivory seizures reported to ETIS declined to the lowest level in seven years and the total estimated weight remained relatively low in spite of the second largest ivory seizure in ETIS since 1989, which occurred in China (Hong Kong SAR). This seizure came from Malaysia and the container was believed to have been packed within that country, which is significant as previously Malaysia was identified as a transit country

rather than as an entrepôt for ivory trade; further, another large-scale seizure made in Viet Nam in 2017 of 1,400 kg of ivory was also believed to have originated from Malaysia and was transported to Viet Nam in a fishing boat. Five of the 2017 large-scale seizures involved transport by sea which accounted for 67% of the estimated total weight, whilst five more were seized during land transport and represented 29% of the total weight; a single consignment transported by air accounted for 4% of the estimated weight.

Table 10: Number, estimated and rounded weight in RIE and number of forensically examined large-scale ivory seizures reported to ETIS, 2008 - 2012 and 2013 - 2017*(ETIS raw data, 21 June 2018)*

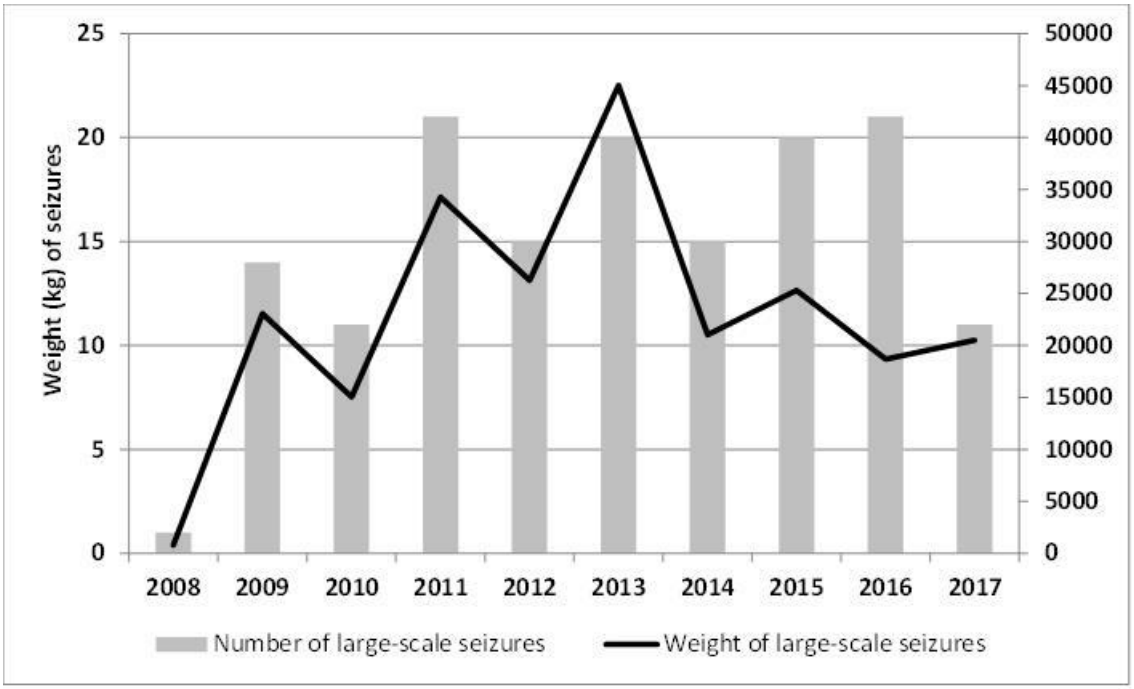
Year	Number of Seizures	Weight of Seizures	Number Forensically Examined		Year	Number of Seizures	Weight of Seizures	Number Forensically Examined
2008	1	800	0		**2013**	20	45,000	7
2009	14	23,000	1		**2014**	15	21,000	6
2010	11	15,000	2		**2015**	20	25,300	2
2011	21	34,300	1		**2016**	21	18,700	2
2012	15	26,300	4		**2017**	11	20,500	2*
Total	**62**	**99,400**	**8 (13%)**		**Total**	**87**	**130,500**	**19 (22%)**

*Another case pending entry into ETIS**.**

Forensic examination of large-scale ivory seizures to elicit the origin of the ivory was mandated by the CITES Parties at CoP16 in March 2013 through an amendment to Resolution Conf. 10.10, whilst at the same meeting Decision 16.83 (now no longer operative) similarly recommended the retroactive testing of all large-scale seizures made since June 2011. In this regard, considerable activity occurred in 2013 and 2014 when between 35-40% of the known large-scale seizures were forensically tested. In the period 2015 through 2017, however, only six of the 52 seizures of 500 kg or more reported to ETIS (11%), had been forensically tested with the information becoming part of the seizure record for this report. The DNA analysis technique pioneered by Dr. Sam Wasser of the University of Washington has accounted for all of the cases noted in Table 10 (Wasser *et al.*, 2015; S. Wasser *in litt.* 25 May 2018), with the exception of one in 2012 that was assessed by a facility at the University of Regensburg in Germany using isotopic analysis; another case involving another DNA-based technique has been led by TRACE, the wildlife forensic network, with the support of the government of Malaysia's forensic lab, but the results have not yet become part of the ETIS record because the majority of samples cannot be reported to a specific country. Overall, in terms of fulfilling the mandate for forensic analysis articulated in Resolution Conf. 10.10 (Rev. CoP17), less than one quarter of large-scale ivory seizures are being examined. Further, at least 14 CITES Parties (including eight participating in the NIAP process) having made such seizures over the last three years but have not undertaken any forensic assessment, according to the information presently available to ETIS. This important issue needs more attention in terms of oversight and accountability, the provision of expertise and resources, and the building of relevant capacity in key countries to make forensic examination a proactive and timely feature of the investigative protocol for ivory trade crime.

Using the raw data on large-scale ivory seizures, Figure 4 presents the reported number and estimated weights of large-scale ivory seizures in the decade commencing in 2008. As stated in the ETIS report to SC69, 2016 had the greatest number of large-scale ivory seizures but the lowest weight in six years, suggesting a decline in the quantity of ivory associated with reported large-scale seizures (CITES, 2017a). For 2017, both the number and the quantity of ivory represented by reported large-scale seizures stayed relatively low.

Figure 4: **Number of, and estimated weights of large-scale (500+ kg) ivory seizures, 2008-2017** *(ETIS raw data, 21 June 2018)*



Seizures of worked ivory from Africa

At SC69, the ETIS report drew attention to an emerging illegal ivory trade pattern that suggested increased ivory processing within Africa for the export of products, particularly chopsticks, name seal blocks, bangles, beads and pendants, to Asian markets (CITES, 2017a). Raw unadjusted data for 2017 continue to provide evidence of this phenomenon with at least 24 cases from four African countries representing 1.11 tonnes of worked ivory (more than 1.5 tonnes in RIE) moving from Africa to Asia. Zimbabwe was the most prominent country, accounting for 13 of these seizure cases and over half of the seized worked ivory; all but two of these transactions were interdicted in China (Hong Kong SAR). Other seizures of worked ivory products going to Asia were exported by Angola, Democratic Republic of the Congo and Ethiopia, all which were being transported by air. While China (especially Hong Kong SAR) accounted for more than half the reported seizures, Viet Nam and Malaysia were the destination for another quarter of these transactions, and Lao People's Democratic Republic and Indonesia were noted as destinations in one case each. As previously reported, this trade typically involves the use of couriers, predominantly Asian nationals, often wearing purposely designed clothing to conceal ivory on the body. In the 2017 data, the United Arab Emirates was identified as the transit country in more than 60% of these cases. This issue will be assessed in greater detail in the ETIS report to CoP18.

Addressing the request made to TRAFFIC in SC69 Com. 11

At the 69th meeting of the CITES Standing Committee (SC69), the Parties adopted SC69 Com. 11 which, in paragraph 5, included the following four requests to TRAFFIC (CITES, 2017b):

5. *Contingent on the provision of external funding, the MIKE and ETIS Subgroup recommend that Standing Committee request TRAFFIC to:*
    a) *Make available the programming code in the ETIS analysis through a repository hosting service, together with appropriate annotations and supporting documentation. This will be augmented with links to existing documents explaining the methods used in the analyses.*

    b) *Finalise the delivery of an on-line facility for Parties to access, download or upload seizure data. Access will be restricted to designated individuals of CITES Management Authorities. Access to data will be provided in accordance with the data access policy outlined in Resolution Conf. 10:10 (Rev. CoP17).*

c) *Send the ETIS report to CoP18 to all Parties identified as potentially requiring attention in the NIAP process at least 30 days prior to the release of the report on the CITES website.*

d) *Produce materials that explain in a stepwise manner the ETIS analysis and conceptual framework. Materials will be targeted at a non-technical audience, in three languages, and made freely and widely available.*

As carrying out these requests is contingent upon external funding. After a meeting with the CITES Secretariat in late March 2018, where an outline funding proposal was discussed, TRAFFIC submitted a final funding document, including work plans and budgets for each activity, to the CITES Secretariat on 8 May 2018 for circulation to the CITES Parties for the purpose of soliciting funds to be able to action these requests from the Standing Committee. A Notification (No. 2018/068), containing the funding strategy developed by TRAFFIC, and inviting Parties, donor agencies, intergovernmental and non-governmental organisation and other appropriate donors to provide financial support to TRAFFIC in this regard, was issued by the CITES Secretariat. The total budget is USD262,442, of which USD87,734 has already been secured. In this regard, TRAFFIC is grateful to the Belgian Government for contributing EUR25,000 (USD30,792) towards the development of activity 2 (the on-line ETIS facility for the CITES Parties) in December 2017, immediately following the conclusion of SC69. Further, a total of USD56,942 of secured funds can be used towards activities 2, 3 (liaison with the CITES NIAP countries) and 4 (production of public awareness materials) from existing funding within the terms of reference for the "*Minimising the Illegal Killing of Elephants and other Endangered Species (MIKES)"* under UNEP Project No: XT 6020-14-03 between the CITES MIKE programme and TRAFFIC, which is funded by the European Union pursuant to EC Project No. FED/2014/342-884. Therefore, the balance of USD174,708 is still being sought. So far, only the Belgian Government has stepped forward to provide funding to ETIS to support the requests made to TRAFFIC at SC69.

Discussion

The global illegal trade in elephant ivory remains dynamic. New policy developments, especially the announcement of impending closure of China's legal ivory market as well as a range of ongoing activities in many other key countries pursuant to the NIAP process under the Convention, provided a salient backdrop against which the illicit ivory trade continued in 2017. This report to SC70 does not include new analysis of bias adjusted ETIS data, which was not possible given the late receipt of seizure data in this reporting period. Consequently, the bias adjusted trend analysis for 2017 (together with a new cluster analysis covering the years 2015-2017) will be presented in the ETIS analysis to CoP18, which is due for submission to the CITES Secretariat at the end of 2018.

In the meantime, the descriptive summary of certain aspects of the raw data for 2017, including the most recent developments with respect to the reported number and estimated weight of large-scale ivory seizures, provides some insights; in the recent past, and as reported in previous ETIS assessments, large-scale ivory seizures have played a crucial role in establishing the upward trend in illegal ivory trade and then stabilising it at record high levels over the last six years (Milliken et al., 2016a and b; CITES, 2017a). Further, the significance of the apparent intensification of ivory processing in Africa for export of finished products to Asia needs to be more thoroughly assessed in the next analysis beyond summary presentations of raw ETIS data. Against a changing policy environment worldwide, the raw data for 2017 indicates that some degree of change in the overall trade may be occurring with fewer movements of large quantities of ivory being replaced by increased processing within Africa for export to Asian markets, but these suggestions will need to be confirmed through more robust analysis of the ETIS data and then triangulated with MIKE, AfESG African Elephant Status Report and other sources of data and information to interpret results accurately. Until then, the fact remains that from 2011 through 2016 illegal trade in ivory was at the highest levels in nearly three decades.

Finally, TRAFFIC remains concerned that the Parties are, in general, submitting seizure data to ETIS at increasingly late intervals which impacts on the ability to produce timely robust results for CITES meetings. Based on triangulating from a variety of other information sources, TRAFFIC is also concerned that many seizure submissions being received from various Parties do not include all seizure cases that have occurred within their jurisdictions. Attempts to validate cases coming from non-government sources in correspondence with relevant CITES Management Authorities have, in many cases, gone unanswered and yet, in all other respects, these cases appear to represent legitimate seizure data that should be in ETIS. The ability of ETIS to deliver neutral, objective results into CITES fora could be compromised if such a situation continues to persist.

Acknowledgements

TRAFFIC acknowledges with gratitude the prompt funding support from the Belgian Government to support implementation of the requests to TRAFFIC in SC69 Com. 11, and to the ongoing funding support from the European Union programmes entitled “Minimizing the Illegal Killing of Elephants and other Endangered Species” and “Asia Wildlife Law Enforcement and Demand Management Project”. The U.S. Fish and Wildlife Service’s African Elephant Conservation Fund and WWF are also thanked for providing support for the operation and management of ETIS since CoP16.

References

CITES (2017a). *Status of Elephant Populations, Levels of Illegal Killing and the Trade in Ivory: A Report to the Cites Standing Committee*. SC69 Doc. 51.1, Annex. Sixty-ninth meeting of the Standing Committee, CITES Secretariat, Geneva, Switzerland. 31 pp.

CITES (2017b). *Report of the MIKE ETIS Subgroup*. SC69 Com. 11. Sixty-ninth meeting of the Standing Committee, CITES Secretariat, Geneva, Switzerland. 1 pp.

Milliken, T., Underwood, F.M., Burn, R.W. and Sangalakula, L. (2016a). *Addendum to the Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A report to the 17th meeting of the Conference of the Parties to CITES.* CoP17 Doc. 57.6 (Rev. 1) Addendum, CITES Secretariat, Geneva, Switzerland. 5 pp.

Milliken, T., Underwood, F.M., Burn, R.W. and Sangalakula, L. (2016b). *The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: a report to the 17th meeting of the Conference of the Parties*. CoP17 Doc. 57.6 (Rev. 1) Annex, CITES Secretariat, Geneva, Switzerland. 30 pp.

Wasser, S.K., Brown, L., Mailand, C., Mondol,S., Clark, W., Laurie, C., Weir, B.S.(2015). Genetic assignment of large seizures of elephant ivory reveals Africa’s major poaching hotspots. *Science* 349 (6243) 84-87.