CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA
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Nineteenth meeting of the Conference of the Parties
Panama City (Panama), 14 – 25 November 2022

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A.   Proposal

The inclusion of all populations of *Loxodonta africana* (African elephants) in Appendix I through the transfer from Appendix II to Appendix I of the populations of Botswana, Namibia, South Africa and Zimbabwe.

This amendment is justified according to the following criteria under Annex 1 of Resolution Conf. 9.24 (Rev. CoP17), Criteria for amendment of Appendices I and II:

"C.   A marked decline in population size in the wild[1], which has been either:

i)   observed as ongoing or as having occurred in the past (but with a potential to resume); or

ii)   inferred or projected on the basis of ...the following:

- a decrease in the area of habitat
- levels or patterns of exploitation,"

It is further justified according to the opening paragraph of Annex 3 of Resolution Conf. 9.24, Special cases:

"Listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates"

and according to the opening paragraph of Annex 4 of Resolution Conf. 9.24, Precautionary measures:

"When considering proposals to amend Appendix I or II, the Parties shall, by virtue of the precautionary approach and in case of uncertainty either as regards the status of a species or the impact of trade on the conservation of a species act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species."

B.   Proponent

Burkina Faso, Equatorial Guinea, Mali, Senegal[*]

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[1]   *A marked recent decline is defined in Resolution Conf. 9.24 (Rev CoP17) p.9 as "a percentage decline of 50% or more in the last 10 years or three generations, whichever is the longer".*

[*]   *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

C.   Supporting statement

1.   Taxonomy

   1.1   Class: Mammalia

   1.2   Order: Proboscidea

   1.3   Family: Elephantidae

   1.4   Genus, species or subspecies, including author and year: *Loxodonta africana* (Blumenbach, 1797

   1.5   Scientific synonyms:

   1.6   Common names: English: African elephant
                                French: éléphant d'Afrique
                                Spanish: elefante africano

   1.7   Code numbers: CITES A-115.001.002.001 (1984(1))
                                ISIS 5301415001002001001

2.   Overview

This proposal seeks to list all African elephant populations in Appendix I in order to offer maximum protection under CITES in the face of the ongoing threat posed by the high demand from the ivory trade, a reduction of more than 50% of the continental population in the past three generations that is understood to be continuing and likely irreversible, and the enforcement problems that current split-listing creates. Elephant populations in all regions of the species' range have experienced ongoing intense pressure from ivory poachers and depredations by criminal syndicates in recent years as evidenced by population declines and continued high annual levels of poaching and ivory seizure indices. Pressure on populations through loss of habitat due to human land use expansion is also a critical and ongoing threat in all areas of range.

With reference to criterion C for the proposed amendment (noted in section A above), a marked recent decline of the wild population in the last 3 generations is sufficiently documented.

At the time of writing, CITES still treats all African elephants as a single species, *Loxodonta africana*[2], as described in section C.1.4 above. However, the IUCN-SSC African Elephant Specialist Group (AfESG) in 2021[3] acknowledged mounting and convincing evidence for and recognised two distinct species – African savanna elephants (*Loxodonta africana* Blumenbach, 1797) and African forest elephants (*Loxodonta cyclotis* Matschie, 1900)[4], and the IUCN Red List has based its assessment of extinction risk on this distinction. Until the new assessment in 2021, the African elephant, *Loxondonta africana*, was categorized as Vulnerable.

The African savanna elephant is categorized as Endangered[5] with extinction, and the African forest elephant as Critically Endangered[6], according to the IUCN Red List assessment, and the causes are identified as poaching for ivory in the short term and habitat loss in the longer term, likely indefinitely.

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[2]   https://cites.org/eng/prog/terrestrial_fauna/elephants

[3]   Hart, J., Gobush, K., Maisels, F., Wasser, S., Okita-Ouma, B., & Slotow, R. (2021) African forest and savannah elephants treated as separate species. Oryx, 55(2): 170-171.

[4]   Wilson, D.E. & Reeder, D.M. (Eds.) (2005) Mammal Species of the World. A Taxonomic and Geographic Reference (3rd Edition), Johns Hopkins University Press.

[5]   Gobush, K.S., Edwards, C.T.T, Balfour, D., Wittemyer, G., Maisels, F. & Taylor, R.D. (2021a) Loxodonta africana (amended version of 2021 assessment). The IUCN Red List of Threatened Species 2021: e.T181008073A204401095. https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T181008073A204401095.en.

[6]   Gobush, K.S., Edwards, C.T.T, Maisels, F., Wittemyer, G., Balfour, D. & Taylor, R.D. (2021b) Loxodonta cyclotis (errata version published in 2021). The IUCN Red List of Threatened Species 2021: e.T181007989A204404464. https://dx.doi.org/10.2305/IUCN.UK.2021-1.RLTS.T181007989A204404464.en.

The African Elephant Status Report (AESR) 2016[7] had already documented a loss of approximately 111,000 elephants of both species in just the 9 years between 2006 and 2015, leaving an estimated total number of elephants of 415,428.

Additional published scientific reports have reported steeper declines in this period (e.g. a 62% decline in elephant populations of the Congo Basin Range states[8]; a loss of 100,000 elephants in a 3-year period on the basis of poaching indices[9]; a 30% decline in elephant populations in >90% of savanna range in a 7-year period[10]). Prior, widespread and steep declines occurred during the intense poaching of the 1970s and 1980s (criterion C.i), followed by a period of population recovery in some areas in the1990s and early 21st century[11]. With the record level of poaching in the last decade, the significant population declines resumed and – unless action is taken – are projected to continue (criterion C.ii). The threat posed by trade is pronounced at the continental level, including in some elephant populations in Appendix II countries.

The Red List Assessment for African savanna elephants[12] used survey data from the AfESG African Elephant Database (AED)[13] and other data sources, a mean generation length estimated at 25 years and a rigorous modelling methodology to estimate a decline of 60% from 1940 to 2015[14]. This trend was described as "*understood to be continuing and likely irreversible.*" It was further noted that "*The continental trend is not, however, spatially uniform; some subpopulations are increasing or stable while others are declining significantly faster than the continental rate. Many local subpopulations have been extirpated*."

The Assessment for African forest elephants used the same modelling methodology, similar data from the AED and other data sources, and a mean generation length of 31 years, reflecting their slower population growth rate. The estimated rate of decline of forest elephants was 86% from 1922 to 2015[15]. Similar comments were made about the geographical variation within the continental trend, as well as its likely irreversible nature.

These trends, combined with threatened status of the species on a continental-scale, call into question the current split listing that was first established in the 1990s, during a time when population and poaching trends suggested recovery, not decline.

Illegal killing of elephants for the ivory trade and trafficking of ivory is widespread across Africa according to reports of the CITES Monitoring Illegal Killing of Elephants (MIKE) Programme and Elephant Trade Information System (ETIS). As with the African Elephant Database, these sources are likely to underestimate the levels of illegal killing and international trading of elephants and their body parts, as noted in sections 5 and 6.4 below. In the face of the very clear threats, appropriate enforcement controls and compliance with the requirements of the Convention have been difficult to achieve. As widely agreed, and according to the CITES Secretariat, the threat to wildlife populations from illegal killing requires action on a global scale[16]: "*No one country, region or agency can tackle illegal wildlife trade alone. Collective action across source, transit and destination states is essential.*" This commitment has been echoed in international fora on illegal wildlife trade, including the Brazzaville Conference of 2014[17], London Conferences in 2014 and 2018[18], and

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[7]   *Thouless, C.R., Dublin, H.T., Blanc, J.J., Skinner, D.P., Daniel, T.E., Taylor, R.D., Maisels, F., Frederick, H.L. & Bouché, P. (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*

[8]   *Maisels, F., Strindberg, S., Blake ,S., Wittemyer, G., Hart, J., et al. (2013) Devastating decline of forest elephants in Central Africa. PLoS ONE, 8(3): e59469.doi:10.1371/journal.pone.0059469*

[9]   *Wittemyer, G., Northrup, J., Blanc, J., Douglas-Hamilton, I., Omondi, P., & Burnham, K. (2014), Illegal killing for ivory drives global decline in African elephants. PNAS, 111(36): 13117-13121.* https://doi.org/10.1073/pnas.1403984111.

[10] *Chase, M.J., Schlossberg, S., Griffin, C.R., Bouché, P.J.C., Djene, S.W., Elkan, P.W., Ferreira, S., Grossman, F, Kohi, E.M., Landen, K., Omondi, P., Peltier, A., Selier, S.A.J., Sutcliffe, R., 2016. Continent-wide survey reveals massive decline in African savannah elephants. PeerJ., 4:e2354.* https://doi.org/10.7717/peerj.2354

[11] *UNEP, CITES, IUCN, TRAFFIC (2013) Elephants in the Dust – The African Elephant Crisis. A Rapid Response Assessment. United Nations Environment Programme, GRID-Arendal.* www.grida.no

[12] *Gobush et al. (2021a) ibid.*

[13] http://www.elephantdatabase.org/

[14] *IUCN (2022) Africa's Elephants (Loxodonta africana and Loxodonta cyclotis) Supplementary Material. The IUCN Red List of Threatened Species. Version 2021-3.*

[15] *IUCN (2022) op.cit.*

[16] https://www.cites.org/eng/news/month-long-trans-continental-operation-hit-wildlife-criminals-hard_20062018

[17] https://archive.pfbc-cbfp.org/rapports/items/rdp14-documentation-fr.html

[18] https://www.gov.uk/government/topical-events/illegal-wildlife-trade-2014 ; https://www.gov.uk/government/topical-events/london-conference-on-the-illegal-wildlife-trade-2018

the Kasane Conference of 2015[19]. Furthermore, the National Ivory Action Plan (NIAP) process[20], initiated by the Parties in 2013, is a testament to the agreed need for careful, comprehensive global action.

Decreasing population and increasing poaching trends in Appendix II-listed populations are evident (as detailed in Sections 4.4, 4.5 and 5 below). Because the Southern African region holds so much of the continental elephant population (>50%)[21] these developments are of great concern for conservation of the species as a whole. Recent research exposed an even higher degree of organization among ivory smuggling networks than previously known[22]. Trends in rhino poaching and horn trafficking, not to mention those for elephants and ivory, in the region demonstrate that serious criminal networks are active[23].

The listing of all African elephants in Appendix I in 1989 was followed by a collapse in global ivory markets and price, ending the prevailing poaching crisis[24]. During the following 15 years, many elephant populations recovered. However, the weakened protection of elephants and exemptions for trade since 1997 are associated with and likely a contributor to a reversal of this positive trend[25]. Economic analyses in recent years demonstrate that many factors may influence ivory markets and price growth[26], leading to an uncertainty on the impact of even limited amounts of trade[27].

There have been several initiatives agreed by CITES Parties in recent years, including an annotation to the Appendix II listing, noting a 9-year moratorium on ivory trade proposals starting in 2008[28], recommendation of domestic ivory market closures in 2016[29], demand reduction strategies, and, as noted above, country-specific NIAPs (National Ivory Action Plans) in ivory source, transit and destination countries. Taken together, these initiatives aim to improve the protection of the species so that continental decline is reversed and precautionary trade safeguards, as set forth in Annex 4 i. and ii. of Resolution Conf.9.24 (Rev.CoP17), are satisfied. However, with the present split listing, these safeguards have not been sufficient. In order to rectify this, the proponents therefore consider a transfer of Appendix II elephant populations to Appendix I as the next logical, essential and urgent step

3. <u>Species characteristics</u>

3.1 Distribution

There are 37 countries in sub-Saharan Africa with elephant populations. Of the two main taxa (see section 3.3 below), savanna elephants are found primarily in Eastern Africa (8 countries[30]) and Southern Africa (9 countries[31]), with forest elephants living mainly in the Congo Basin of Central Africa

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[19] https://www.gov.uk/government/publications/illegal-wildlife-trade-kasane-statement

[20] https://www.cites.org/eng/niaps

[21] Thouless et al. (2016) ibid.

[22] Wasser S.K., Wolock C.J., Kuhner M.K., Brown, J.E., Morris C., Horwitz R.J., Wong A., Fernandez, C.J., Otiende M.Y., Hoareau Y., Kaliszewska Z.A., Jeon E., Han K. & Weir, B.S. (2022) Elephant genotypes reveal the size and connectivity of transnational ivory traffickers. Nature Human Behavior. 6: 371–382. https://doi.org/10.1038/s41562-021-01267-6

[23] https://www.savetherhino.org/rhino-info/poaching-stats/

[24] UNEP, CITES, IUCN, TRAFFIC (2013) ibid.

[25] CoP17. Inf. 96 (2016) Evidence should be used in global management of endangered species: A reply to the CITES Technical Advisory Group. submitted by Kenya on behalf of the African Elephant Coalition to Seventeenth meeting of the Conference of the Parties, Johannesburg (South Africa), 24 September – 5 October 2016 .

[26] Gao, Y., Clark, S.G. (2014) Elephant ivory trade in China: Trends and drivers. Biological Conservation, 180: 23-30.

[27] Nadal, A. & Aguayo, F. (2016) Use or destruction: on the economics of ivory stockpiles. Pachyderm, 57: 57-67.

[28] CITES (2016) Current rules on commercial international trade in elephant ivory under CITES and Proposals to CITES CoP17. Statement by the CITES Secretariat, 21 July, 2016. https://cites.org/eng/news/Current_rules_commercial_international_trade_elephant_ivory_under_CITES_Proposals_CITES_CoP17_200716#6

[29] Resolution Conf. 10.10 (Rev CoP18). Trade in elephant specimens. Resolution amended at the 11th, 12th, 14th, 15th, 16th, 17th and 18th meetings of the Conference of the Parties to CITES.

[30] Countries in East Africa with elephant populations: Eritrea, Ethiopia, Kenya, Rwanda, Somalia, the Republic of South Sudan, the United Republic of Tanzania, Uganda

[31] Southern Africa: Angola, Malawi, Mozambique, Swaziland, Zambia (Appendix I); Botswana, Namibia, South Africa, Zimbabwe (Appendix II)

(7 countries[32]). West Africa (13 countries[33]) has elephants in both savanna and forest habitats; most of these are the forest elephant species, even if living in savanna habitats due to disturbance and forest destruction. The elephant population of Mauritania has disappeared since 1989, while those of Senegal and Sierra Leone are under severe threat and at very low numbers.

The geographical extent and trends of elephant range areas are described in Section 4.5. Elephant populations in West Africa are distributed in small patches of highly fragmented habitat; while available habitat is more continuously distributed in Central, Eastern and Southern Africa, fragmentation is becoming an increasing problem in all regions.

3.2 Habitat

African elephants occupy a wide range of habitats, from near-desert in Namibia and Mali, through various types of semi-arid savanna ecosystem across much of the continent, to tropical forests in Central Africa.

3.3 Biological characteristics

Recent genetic and other findings support the designation of two species of African elephant: the savanna elephant (*Loxodonta africana*) and the forest elephant (*Loxodonta cyclotis*).[34] Hybridization is known to occur in a small number of localized sites, primarily as a consequence of disturbance of habitats and populations by humans. The IUCN-SSC AfESG has now recognized the two distinct species but the separation has yet to be formally recognized by CITES in its Identification Manual[35]. In Southern Africa, only the savanna elephant is present.

3.4 Role of the species in its ecosystem

African elephants play a keystone role in shaping the structure of forests, woodlands and savanna, creating spatial heterogeneity and landscape-level diversity, dispersing seeds and facilitating access to water for a range of other species. The loss of such keystone megafauna from ecosystems could have profound and long-lasting negative effects on ecological structure and function[36]. When confined by artificial barriers such as fences or land use blocking movement corridors, this habitat modification role may be seen as locally excessive in relation to the conservation of desirable plant and animal species[37]. However, African forest elephants play an essential role in the maintenance of forest-savanna ecotones[38], and in promoting both the structural diversity and carbon storage capacity of tropical forests[39]. In African savannas, elephants may reduce above-ground carbon stocks overall, but this is

[32] Central Africa: Cameroon, Central African Republic, Chad, Republic of Congo, Democratic Republic of Congo, Equatorial Guinea, Gabon

[33] West Africa: Benin, Burkina Faso, Cote d'Ivoire, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo

[34] Roca, A.L., Ishida,Y., Brandt, A.L., Benjamin,N.R., Zhao,K.& Georgiadis, N.J. (2015) Elephant natural history: A genomic perspective. Annual Review of Animal Biosciences, 3:139-167.

[35] http://citeswiki.unep-wcmc.org/IdentificationManual/tabid/56/ctl/sheet/mid/369/currentTaxaID/12392/currentTaxaType/Species/currentKingdom/0/sheetId/659/language/en-US/Default.aspx

[36] Barnosky, A.D., Lindsey, E.L., Villavicencio, N.A., Bostelmann, E., Hadly, E.A., Wanket, J. & Marshall, C.R. (2015) Variable impact of late-Quaternary megafaunal extinction in causing ecological state shifts in North and South America. PNAS, 113 (4) 856-861. http://dx.doi.org/10.1073/pnas.1505295112

[37] Van Aarde, R.J. & T.P. (2007) Megaparks for metapopulations: Addressing the causes of locally high elephant numbers in southern Africa. Biological Conservation, 134: 289–297.

[38] Cardoso A.W., Malhi Y., Oliveras I., Lehmann D., Ndong, J.E. Dimoto E., Bush E., Jeffery K., Labriere N., Lewis S.L., White L.T.J., Bond W., & Abernethy K. (2020) The role of forest elephants in shaping tropical forest–savanna coexistence. Ecosystems, 23: 602–616. https://doi.org/10.1007/s10021-019-00424-3

[39] Berzaghi F., Longo M., Ciais P., Blake S., Bretagnolle F., Vieira S., Scaranello M., Scarascia-Mugnozza G. & Doughty C.E. (2019) Carbon stocks in central African forests enhanced by elephant disturbance. Nature Geoscience, 12: 725–729. https://doi.org/10.1038/s41561-019-0395-6

compensated by increased soil carbon sequestration[40]; their action in promoting soil carbon stocks counters the negative impact on carbon emissions of other large herbivores[41].

4. Status and trends

4.1 Habitat trends

Habitat loss, through conversion of forests, savanna and corridors to plantation, subsistence agriculture and settlement is the most significant long-term threat to elephant populations. The AESR 2016 reports a steady loss of elephant range (see Section 4.5 below), although it also points out that changes to date cannot distinguish between contraction in true elephant range and changes/ improvements in the way range is estimated. The AESR 2016 reports recent range expansion in selected sites in Kenya and Botswana only.

4.2 Population size

The primary source of data on elephant range areas and population sizes is the AED[42]. Reports from the AED were issued in 1995, 1998, 2002, 2007, and 2016. Estimates incorporated into the AED are first screened and scrutinised by a data quality working group for completeness and reliability. All population surveys and estimates, and thus the AfESG status reports, to date have not distinguished between the two African elephant species. Future versions of the AESR will be issued separately for forest and savanna elephant populations[43].

The AESR 2016 included data received through 2015; population numbers are categorized as 'Estimates' (e.g. based on data collected from aerial and ground surveys and reliable dung counts) and 'Guesses' (other dung counts and guesses). The most recent continental population total based on 'Estimates' was 415,428 (+/- 20,111). However, important areas that are difficult to survey are under-represented in this total, such as continuous forests in Gabon and Republic of Congo, to name a few.

The four Appendix II countries had a corresponding 2015 total of 255,851 and country totals as follows: Botswana 131,626, Namibia 22,754, South Africa 18,841, and Zimbabwe 82,630. The AESR 2016 noted, in its discussion of these national populations, that the transboundary nature of elephant populations in the region of northeastern Namibia, northern Botswana, southwestern Zambia, southeastern Angola and northwestern Zimbabwe known as the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) requires coordination of surveys to avoid double-counting or undercounting. Some 75% of total African elephant numbers are therefore transboundary, meaning that elephants move and migrate between different countries[44]. As the surveys collated by the AESR were not conducted in a coordinated fashion, there is some doubt over the reliability of national population totals reported in the AESR 2016 for the KAZA countries. A coordinated survey of the KAZA elephant populations is planned to start in July 2022[45].

4.3 Population structure

African elephants are matriarchal with adult females typically forming life-long families and other hierarchical groupings on the basis of kinship. Males disperse from natal family groups at maturity and form bonds with other males or live solitarily. The mean age of adults in and the social structure of elephant family groups are disrupted by poaching, which first targets the oldest adult animals with the largest tusks.[46] Such selective killing results in a cascade of behavioural, physiological and reproductive

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[40] Sandhage- Hofmann A., Linstädter A., Kindermann L., Angombe S. & Amelung W. (2019) Conservation with elevated elephant densities sequesters carbon in soils despite losses of woody biomass. Global Change Biology, 27: 4601–4614. https://doi.org/10.1111/gcb.15779

[41] Sitters J., Kimuyu D.M., Young T.P., Claeys P. & Venterink H.O. (2020) Negative effects of cattle on soil carbon and nutrient pools reversed by megaherbivores. Nature Sustainability, 3: 360–366. https://doi.org/10.1038/s41893-020-0490-0

[42] http://www.elephantdatabase.org/

[43] Hart et al. (2021) ibid.

[44] Lindsay, K., Chase, M., Landen, K. & Nowak, K. (2017) The shared nature of Africa's elephants. Biological Conservation, 215: 260–267.

[45] Nghitila, T. 2021. Launch Of The First Ever KAZA-Wide Coordinated Aerial Survey. Kavango Zambezi. https://www.kavangozambezi.org/en/news-public/item/57-launch-of-the-first-ever-kaza-wide-coordinated-aerial-survey Accessed 10 May 2020.

[46] Cobb, S. & Western, D. (1989) The ivory trade and the future of the African elephant. Pachyderm, 12: 32-37.

effects on the surviving elephant population[47]. Since the oldest females, the matriarchs, are the repositories of knowledge of social relationships and ecological hazards and rewards, their irreversible loss affects the survival chances of entire families[48]. The removal of the most successful adult bulls is likely to increase reproductive skewness and reduce genetic diversity in the surviving populations[49]. The negative effect of drastic depletion of both females and male elephants on genetic diversity has been well documented in Uganda[50], which suffered massive losses during the 1970s-80s poaching crisis. The effects of the high levels of ivory poaching during 1977-92 in Mozambique have persisted for decades, leaving a high proportion of tuskless elephants in succeeding generations[51].

4.4   Population trends

The AESR 2016 noted that, because of methodological issues, trends of decline in countries within regions may be masked by changes in the type and quality of surveys between years and the possibility that additional elephant numbers estimated in surveys of some areas may compensate for reductions elsewhere.

The AESR 2016 stated (p.29) that "*This is the first African Elephant Status Report in 25 years which has reported a continental decline in elephant numbers.*" These declines have been attributed primarily to a surge in poaching. While recent declines have been notable across all regions of Africa, the intensity of declines is uneven, with "hotspots" apparent in each region.

A separate compilation and modelling of survey data for Central Africa[52] has shown that for forest elephants "population size declined by ca. 62% between 2002–2011, and the taxon lost 30% of its geographical range." Because their demographic processes are slower than for the savanna elephant, the ability of forest elephants to recover from illegal killing is extremely limited.[53]

An independent analysis published in 2014[54] of trends across Africa, using a study population in central Kenya to provide data for modelling of poaching in other populations at MIKE sites with known PIKE (Proportion of Illegally Killed Elephants) values, produced an estimate of a 3% reduction in the continental population for the single year 2011, and approximately 100,000 elephants lost to poaching in 2010-2012.

Approximately 90% of savanna elephant populations were surveyed systematically in 2014-2015 by The Great Elephant Census (GEC)[55], a continent-wide programme of aerial surveys funded by Paul G Allen Philanthropies and working in collaboration with national governments and a number of NGOs. The results of the programme[56] estimated a decline of 30% in 18 countries since 2007, with the annual rate of decline as high as 8% during 2010-2014.

The Southern Africa region as a whole experienced a decline during 2006-2015 of 8.6%, equating to almost 30,000 elephants on the basis of updated estimates for sites where comparable survey techniques were employed. In particular, Botswana, Zimbabwe and Mozambique had declines of 15%, 10% and 34% respectively[57].

[47]   *Gobush, K.S., Mutayoba, B.M., & Wasser, S.K. (2008) Long-term impacts of poaching on relatedness, stress physiology, and reproductive output of adult female African elephants. Conservation Biology, 22: 1590-1599.*

[48]   *McComb, K., Moss, C., Durant, S.M., Baker, L., & Sayialel, S. (2001) Matriarchs as repositories of social knowledge in African elephants. Science, 292, 491–494.*

[49]   *Archie, E.A. & Chiyo, P.I. (2012) Elephant behaviour and conservation: social relationships, the effects of poaching, and genetic tools for management. Molecular Ecology, 21:765–7*

[50]   *Nyakaana S., Abe E.L., Arctander P. & Siegismund H.R. (2001) DNA evidence for elephant social behaviour breakdown in Queen Elizabeth National Park, Uganda. Animal Conservation, 4: 231-237.*

[51]   *Campbell-Staton S.C., Arnold B.J., Gonçalves D., Granli P., Poole J., Long R.A. & Pringle R.M. 2021. Ivory poaching and the rapid evolution of tusklessness in African elephants. Science, 374(6566): 483-487.*

[52]   *Maisels et al. (2013) ibid.*

[53]   *Turkalo, A.K., Wrege, P.H., Wittemyer, G., 2017. Slow intrinsic growth rate in forest elephants indicates recovery from poaching will require decades. Journal of Applied Ecology, 54, 153–159.* http://dx.doi.org/10.1111/1365-2664.12764.

[54]   *Wittemyer et al. (2014) ibid.*

[55]   http://www.greatelephantcensus.com/

[56]   *Chase et al. (2016) ibid.*
[57]   *Thouless et al. (2016)* ibid.

Botswana: Elephant movement between countries in the transboundary KAZA region, as well as increased poaching and methodological differences are a likely contributor to the apparent decline in Botswana[58]. Carcass ratios were among the largest of any site in the GEC in south-eastern Angola and south-western Zambia, both a part of KAZA TFCA and bordering Botswana.

Namibia: Surveys of elephants in Namibia, which were not coordinated with the other surveys under the GEC, showed an increase in numbers, particularly in the north-eastern area of the country where it shares a long border with north-western Botswana. The AESR 2016 notes that "…with wide confidence limits in aerial surveys and elephants moving across international borders, it is not possible to be precise about how great the increase in the national population has been."

South Africa: The AESR 2016 reported an increase of about 1000 elephants in South Africa between 2006-2015 on the basis of Estimates. Closures of artificial water in Kruger National Park, the site with the most elephants in the country, have been associated with a lowered rate of population growth (down to 4.2%).

Zimbabwe: Zimbabwe's population has declined due to reductions in populations in two regions, partially compensated by increases in populations in two other regions. The AESR 2016 reports: "*Whereas conservation challenges associated with high elephant densities in large protected areas were common in the region a decade ago, contemporary elephant conservation in southern Africa is now also faced with the emergence of a growing poaching threat (UNEP et al. 2013[59]). While overall, poaching has not had the same impact in southern Africa as in other regions, it has severely affected populations in Zimbabwe, Angola, Mozambique, and to a lesser extent, Zambia".*

4.5 Geographic trends

The total range area (defined as 'Known' and 'Possible') across Africa was approximately 3.1m km^2 in 2015; this represents a 6% decrease compared to 2007 (3.3m km^2 reported), and a 36% decrease from 2002, which was itself an 8% decrease from the 1998 estimate. Some of this apparent range contraction may be due to improved information. However, despite the caveats over drawing quantitative conclusions about the rate of range loss, it is safe to accept that there has been a steady trend of decline over time in the range available for elephants.

As noted above in section 4.1, the loss of habitat through land conversion is a significant long-term threat to elephant populations. At the same time, it appears that pressure from poaching has in many areas (particularly tropical forests of Central Africa) either eliminated entire elephant populations or reduced population densities to very low levels[60].

AED range data for Southern Africa indicate that there was a regional decline of some 21% of 'Known and Possible' range combined from 2002 to 2015 (however, there was a very slight increase between 2006-2015, attributable to range expansion in Botswana only).

The elephants' range over the four Appendix II countries now covers just over 504,000 km^2 (Botswana 228,073 km^2, Namibia 164,069 km^2, South Africa 30,651 km^2, Zimbabwe 81,228 km^2). Summaries of elephant range issues in these four countries are provided below.

Botswana: In their northern range elephant populations have expanded westwards from the Chobe area into former range areas in the Okavango Delta and along the Kavango River; since 2006, there has also been range expansion southwards into the Central Kalahari Game Reserve, as far as Ghanzi and Kweneng Districts. Cross-border elephant movement occurs in the KAZA TFCA into Namibia, Zambia, Zimbabwe and Angola. A separate small population in the east of the country occurs in the Northern Tuli Block, with movement into south-eastern Zimbabwe and northern South Africa (i.e. the Greater Mapungubwe TFCA)[61].

[58]   Thouless et al. (2016) ibid.

[59]   UNEP, CITES, IUCN, TRAFFIC (2013) Ibid.

[60]   Breuer, T., Maisels, F. & Fishlock, V. (2016) The consequences of poaching and anthropogenic change for forest elephants. Conservation Biology, 30(5): 1019-1026. https://doi.org/10.1111/cobi.12679

[61]   Blanc, J.J., Barnes, R.F.W., Craig, G.C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I. & Hart, J.A. (2007) African Elephant Status Report 2007: an update from the African Elephant Database. Occasional Paper Series of the IUCN Species Survival Commission, No. 33, LUCN/SSC African Elephant Specialist Group, IUCN, Gland, Switzerland, vi + 276pp.

Namibia: Namibia's elephant population occurs only in the north of the country, with most elephants found in the north-east in the KAZA areas bordering Botswana and Angola, particularly in Zambezi region and in Khaudom-Kavango. A separate population has been protected inside Etosha National Park, which is adjacent to the population of "desert elephants" in Kunene in the north-west. Community conservancies had land allocated in the past couple of decades, increasing elephant range in the north-east and to the north of Etosha NP[62]. However, this range expansion pre-dates 2006 (the AESR 2016 reported range expansion in Kenya and Botswana only when comparing estimates from 2006 to 2015).

South Africa: The great majority of the country's elephants are in one area, Kruger National Park. Otherwise elephants are confined largely to fenced protected areas and private reserves in 2% of the country's total land area. Those reserves bordering Kruger have populations with ranges that are contiguous with the Park, but the others, which are isolated and scattered around the country, are too small to sustain viable populations. The on-going creation of trans-frontier parks and conservation areas with Mozambique and Zimbabwe could lead to the expansion of elephant ranges in all three countries, but efforts are partly being frustrated by the deteriorating situation in Mozambique and in Zimbabwe.

Zimbabwe: Zimbabwe's elephants are primarily found in four broad regions: Northwest Matabeleland, Sebungwe, the Southeast Lowveld and the Lower Zambezi Valley, each containing at least one national park plus communal conservancies and other protected land. In 2015, Hwange National Park (Northwest Matabeleland), a park that includes artificial water points and contiguous with Botswana, held the majority of the country's elephants. Since 2002, Zimbabwe has seen a decrease of greater than 20% of elephant range (compared to 2015 estimates in which 97% of all possible range was assessed). Decades ago, a successful communal conservancy model (CAMPFIRE) was initiated in Zimbabwe which contributed to range expansion then but its effectiveness has declined in recent years[63].

5.   Threats

Across the continent, the long-term threat to elephants is the loss or conversion of habitat through human expansion into elephant range, associated human-elephant conflict and the impacts of climate change. In Central African forests, the impacts of forestry activities including both deforestation (habitat loss) and the building of roads (increasing human access) pose serious long-term and ongoing threats[64]. Poaching remains a major threat to elephants, with an analysis of trends showing no significant decrease across Africa in data available from 2011 to 2018[65].

Data from the MIKE programme – the primary source of data on levels of elephant poaching in Africa – indicates that by 2011, poaching reached the highest levels since the programme began in 2002[66], with a moderately declining trend thereafter. Poaching levels as indicated by PIKE values from MIKE sites remained high and outnumber birth rates (indicated by PIKE >0.5) until 2018 and decreased in 2019 and 2020 (PIKE < 0.5). An analysis of PIKE data published in 2014 concluded that poachers killed 40,000 elephants in 2011 alone, and in just 3 years (2010-2012), 100,000 elephants were killed in Africa for their ivory[67]. Hwange National Park was added to MIKE only in 2020.

All African elephant populations in all regions are at risk. The most recent MIKE analysis that examined PIKE data through the end of 2022 and was reported by the CITES Secretariat in March 2020[68], shows that poaching levels remain alarming in West, Central and Southern regions.

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[62]   *Blanc et al. (2007) op. cit.*

[63]   *Balinta, P.J. & Mashinya, J. (2006) The decline of a model community-based conservation project: Governance, capacity, and devolution in Mahenye, Zimbabwe. Geoforum, 37: 805-815.*

[64]   *Maisels et al. (2013) op. cit.*

[65]   *Schlossberg, S., Chase, M. J., Gobush, K. S., Wasser, S. K., & Lindsay, K. (2020). State-space models reveal a continuing elephant poaching problem in most of Africa. Nature Scientific Reports, 10(1), 1-9. https://www.nature.com/articles/s41598-020-66906-w*

[66]   *Schlossberg et al. (2020), op.cit.*

[67]   *Wittemyer et al. (2014) ibid.*

[68]   *SC74 Doc 68*

Forensic examination of shipments of seized ivory from 2002 to 2019 showed an increase in poaching in Southern Africa. Of the 196 forensic analysed tusks from seizures, 172 were inferred to originate in the KAZA Transfrontier Conservation Area, pointing to a newly emerging poaching hotspot in Southern Africa[69].

The MIKE report to SC74 suggested that there has been downward movement in the rates of illegal killing for Africa as a whole since the reporting to CoP18. The reduced poaching rates in the past two years at the continental level was due largely to a decline in Central and Southern African sites, with East African sites remaining relatively unchanged and West African data difficult to interpret, due to small sample sizes.

While these results may appear to show positive news on elephant poaching, it is far too early to draw any conclusions about a reduction in threat to elephants. If anything, the results – if confirmed by data from subsequent years - indicate that international enforcement coordination and demand reduction efforts are having their intended impacts on the criminal supply chains that remain active in source, transit and destination countries.

The MIKE programme is considered to provide conservative estimates of poaching rates based on ranger patrol monitoring[70]. The MIKE sites with the best quality data are relatively intensively managed; therefore, PIKE values may underrepresent poaching mortality in a country if heavily based on such sites.

A recent scientific review of the methodology employed to prepare the CITES the MIKE/PIKE analyses indicated that using a [more balanced methodology/different modelling] showed "that illegal killing has improved little or even worsened since 2011 in Southern, Western, and Central Africa."[71] The study also raised concerns regarding declining trends in two major elephant populations in southern Africa.

While attempts have been made to select MIKE sites that are representative of national and regional trends, some concerns are held that the existing sites do not adequately represent poaching losses and do not cover the whole of the elephant range. It was noted at the 65th CITES Standing Committee meeting[72] that "MIKE data…may have underestimated the true scale at which elephant populations are being decimated in parts of Africa." Examples of known significant declines in Tanzania[73] and five countries in Central Africa[74] were not detected by PIKE trends in MIKE sites in certain years in those areas. The decline and poaching increases in non-MIKE sites is also missed such as in Zambia (Sioma Ngwezi National Park, a part of KAZA TFCA). Here, the GEC found an exceedingly high carcass ratio of 85%. According to the Principal Investigator, "*The Kwando area of southwestern Zambia is experiencing the worst poaching of any major savanna elephant population*"[75], and warned that "because Sioma Ngwezi is close to Botswana's Okavango Delta region – the world's largest single remaining population – it's only a matter of time before poachers begin killing elephants there"[76].

Botswana: In 2016, the IUCN African Elephant Status Report noted an increase in elephant poaching in Botswana. In 2019, researchers found[77] that despite stable elephant populations, numbers of (fresh) elephant carcasses in Northern Botswana increased by 593% between 2014 and 2018, indicating a growing poaching crisis, with estimates suggesting a minimum of 385 elephants were poached in Botswana between 2017 and 2018. There is evidence that ivory poaching on the scale of hundreds of elephants per year has been occurring in northern Botswana since 2017 or possibly earlier. Elephant poaching and ivory trafficking is a transboundary issue in Southern Africa, with reports of poachers crossing into Zimbabwe, Botswana,

[69]   *Wasser et al. (2022) ibid.*

[70]   *Wittemyer et al. (2014) ibid.*

[71]   *Schlossberg et al. (2020) ibid.*
         https://www.nature.com/articles/s41598-020-66906-w.

[72]   *SC65 Doc. 42.7. Disposal of Ivory Stocks. Document submitted by Chad and the Philippines in support of Comoros to the Sixty-fifth meeting of the Standing Committee Geneva (Switzerland), 7-11 July 2014.*

[73]   *Jones, T. & Nowak, K. (2013) Elephant declines vastly underestimated. National Geographic - A Voice for Elephants, December 2013. http://newswatch.nationalgeographic.com/2013/12/16/elephant-declines-a-view-from-the-field/*

[74]   *Maisels et al. (2013), op.cit.*

[75]   *Cruise, A. (2016) Elephants wiped out on alarming scale in Southern Africa. National Geographic, 6 April 2016 https://www.nationalgeographic.com/animals/article/160406-elephants-wiped-out-alarming-scale-Southern-Africa*

[76]   *Cruise (2016) op.cit.*

[77]   *Schlossberg S., Chase M.J. & Sutcliffe R. (2019) Evidence of a growing elephant poaching problem in Botswana, Current Biology, 29(13): 2222-2228. https://doi.org/10.1016/j.cub.2019.05.061*

Zambia and Namibia to poach ivory.[78] Since 2019, very little information has been published about elephant poaching in Botswana, an issue of transparency in and of itself, and in 2021 there were reports of worsening rhino poaching dating back to 2018.[79]

Namibia: In 2016, the IUCN African Elephant Status Report noted an increase in elephant poaching in Namibia's Zambezi region. In the KAZA region, 62 tusks were seized in 2020 and 64 arrests were made relating to poaching and ivory, indicating that this remains a transboundary issue of concern in Namibia, Botswana and Zambia.[80]

South Africa: In 2016, the IUCN African Elephant Status Report noted an increase in South Africa's Kruger Park.

Zimbabwe: In 2014, elephant population numbers fell by 76% in Zimbabwe's Sebungwe ecosystem following a noted increase in numbers of elephant carcasses which began in the early 2000s.[81]

The fact that Poachers are continuing to target areas in Appendix II countries that had been considered "safe" is indicative of the level of pressure exerted by criminal syndicates and the vulnerability of the elephant populations. Many of these sites have ongoing, serious rhino poaching as well. The trend in poaching levels, while stabilizing recently, remains one of continuing threat, with even the Appendix II countries facing potentially large population declines, in line with the trend in numbers reported in the AED results (section 4.4 above).

6. Utilization and trade

   6.1 National utilization

   Elephants are utilized in a variety of ways in Africa: ivory, skin and hair are made into a variety of products; elephant meat is consumed in parts of West, Central and Southern Africa; elephants are hunted for sport; and live elephants are caught for entertainment purposes.

   While Botswana has no legal domestic ivory market (except for allowing one-off transfers of ownership), legislation in Namibia, South Africa and Zimbabwe allows domestic sales of ivory subject with permits. However, effective tracking of retail ivory markets was reported to be only "Partial" in all three countries in 2004[82]. It is therefore not clear whether the domestic ivory markets in the three countries are effectively monitored today. If these domestic markets are not closed, illegal trafficking will increase and ivory will be laundered through them from other African countries.

   All four countries have legalized sport hunting of elephants – see section 7.1 National legislation.

   Products made from elephant hair were sold in Namibia, seemingly as a by-product of trophy hunting and according to CITES implementing legislation, parts from elephants may still be sold subject to permit - see section 7.1 National legislation. Zimbabwe's proposal to CoP12 (proposal Prop. 12.10) reported that hide is recovered from animals mainly shot for problem animal control (PAC) as well as on legal hunting operations, or killed for other management reasons such as "mercy killing or killing in self-defence". In South Africa, the hides from hunted PAC elephants can be sold. In 2002, it was reported that "Botswana presently does not recover elephant hide from elephant killed in protection of property due to lack of storage"; it was reported 12 years ago in 2006 that there was a small legal trade in hides, mainly to Zimbabwe[83].

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78   *https://oxpeckers.org/2018/08/confessions-of-an-ivory-poacher/*

79   *Nkala O. (2021) Southern Africa: Botswana rhino poaching worsens as government dithers.* NewZimbabwe.com*, 16 May 2021. https://allafrica.com/stories/202105160101.html*

80   *https://communityconservationnamibia.com/the-big-issues/combatting-wildlife-crime*

81   *Chase* et al *(2016)* ibid.

82   *TRAFFIC (2004)* Domestic ivory markets: Where they are and how they work. *Briefing Document for CoP13. TRAFFIC International, Cambridge.*

83   *Anon (2006)* Elephant Conservation and Management and the Ivory Trade in Botswana and South Africa. *Unpublished report. November 2006.*

6.2 Legal trade

The split-listing of African elephants means that commercial trade in specimens from elephant populations in Appendix I is not permitted, while exemptions allow ivory and other specimens from the populations of the four Appendix II countries to be traded. This means that CITES policy on elephants is being pulled in different directions. Allowing the use of conflicting policy instruments leads to confusing policy signals that are likely to be misinterpreted by existing market structures. Market networking and economic forces do not distinguish between Appendix I and Appendix II ivory and the evolution of poaching statistics appears to confirm this fact. This intrinsic tension of split-listing feeds expectations that ivory trade could be legalized. These expectations have an important influence on investment decisions since capital-widening investments are made to meet future market expansion. This leads to a consolidation of existing market institutions in the legal markets and reinforces linkages between legal and illegal trade.

Under the Appendix II status of these elephant populations, two "one-off" sales of registered raw ivory from government-owned stocks (excluding seized ivory and ivory of unknown origin) were authorized – the first to Japan in 1999 and the second to Japan and China in 2008. For 9 years after the 2008 sale authorised at CoP14 (i.e. until 2017), it was decided "no further proposals to allow trade in elephant ivory from populations already in Appendix II shall be submitted to the Conference of the Parties"[84]. However, Namibia and Zimbabwe were allowed to maintain exemptions for continuous sales of ivory as jewellery or "ekipas" (Namibia) – but see Section 6.5 below – and carvings (Zimbabwe) for "non-commercial purposes". These constant changes in objectives and policy instruments have the potential for reinforcing existing legal and illegal trade investments and institutions, and may lead to locking in of trajectories that further restrict policy alternatives.

A report by UNEP-WCMC on legal trade in elephant parts and derivatives for the period 2015-2016 was presented to the SC70 meeting[85]. This report echoed results of the report for the period 2012-13 which was provided to the SC66 meeting[86]. Reported legal trade in *L. africana* directly from African range States came principally from hunting trophies (including tusks). Records for 2015-16 showed the direct export of 12,543 kg and 133 tusks by number, while importing countries recorded the import of and 124 kg and 752 tusks, a notable discrepancy, due in part to differences in reporting in source and destination countries.

The CITES Trade Database shows wide discrepancies between export and import records in a range of elephant products that are supposedly subject to transaction controls. For the year 2010 alone, it was noted that the figures for exports by Zimbabwe and imports into China were markedly different for ivory carvings, tusks and trophies[87]. A broader analysis of figures from the CITES Trade Database[88] shows that over the 7-year period including 2010 to 2016, China reported receiving 293 ivory carvings, 513kg of tusks, and 263 trophies from Zimbabwe, while Zimbabwe's records of exports to China showed 6,229 ivory carvings, 4,677kg of tusks and only 25 trophies. At the end of 2017, China implemented an ivory ban. In 2017 Zimbabwe declared small amounts of ivory carvings and 21.6 kg of ivory tusks to China but China did not report any ivory carvings or ivory tusks since 2017. Zimbabwe reported exports of 32 live elephants, however, China declared 39 animals in the same year in 2017. In 2019 Zimbabwe declared exports of 32 live elephants and none has been reported by China until the time of writing. Between 2017 and 2020, the latest year that the data is available, Zimbabwe reported exports of 1,400 leather goods while China only reported 3 during the same period. The discrepancies between the two countries' reports extend to every type of elephant specimens.

Trade in tusks reported by weight in 2015-16 was exclusively from Zimbabwe; exports were primarily hunting trophies and again there were discrepancies between the export and import records. Exports of tusks for trophies apparently exceeded quotas for Namibia and Botswana, although there was

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84   *Annotation 6 to the Appendix II listing of populations of* Loxodonta africana *in Botswana, Namibia, South and Zimbabwe. Appendices I, II and III, valid from 5 February 2015.*

85   *SC70 Doc 49.1, Annex 1.* Elephant conservation, illegal killing and ivory trade. *Report by the CITES Secretariat to the Seventieth meeting of the Standing Committee Rosa Khutor, Sochi (Russian Federation), 1-5 October 2018*

86   *SC66 Doc 47.1. Annex 1.* Elephant conservation, illegal killing and ivory trade. *Report by the CITES Secretariat to the Sixty-sixth meeting of the Standing Committee Geneva (Switzerland), 11-15 January 2016.*

87   *Nuwer, R. (2018) How well does CITES really prevent wildlife trafficking and illegal trade?* Ensia*, October 4, 2018.* https://ensia.com/features/cites/

88   https://trade.cites.org/ *; accessed on 29 October 2018, with data extracted for exports of* Loxodonta africana *from Zimbabwe to China during 2010 to 2018. Note that the most recent records date from 2016.*

inconsistent reporting of parts from the same animal, either as separate trophies or combined into one trophy. This lack of coherence indicates that domestic markets are poorly regulated and offer broad opportunities for laundering.

The tension introduced by the split-listing of African elephants, the apparent lack of effective control of existing legal markets and the expectation that legal trade may be introduced is a powerful combination of forces that seriously influences the global ivory market.

6.3   Parts and derivatives in trade

Ivory (raw tusks and worked), skin, leather, hair, meat and live specimens are all traded. The international trade ban is marked by many loopholes and ample room for evading its controls-

6.4   Illegal trade

Data on the illicit ivory trade reinforces and extends the reports of poaching from MIKE field sites. Seizure data from the CITES Elephant Trade Information System (ETIS) reported to CoP18[89] showed, in line with earlier reports, that ivory seized in illegal trade rose dramatically in 2009 and in 2013 was at its highest levels since ETIS records began in 1989. The same report suggests that the true number of illegal ivory seizure records could be considerably greater and points to incomplete or late reporting by Parties as a reason for this. More recently, the ETIS Report to SC74 indicated that 2020 was an outlier reporting year due to the COVID pandemic and lower levels of reported seizures cannot be interpreted as lower rates of ivory trafficking and that illegal trade has continued throughout the pandemic and caution is necessary to ensure the conservation of highly threatened savanna and forest elephants across the continent.[90] The same report highlights again that under-reporting by CITES Parties is preventing trends in illegal trade from being analysed and monitored effectively, indicating that true levels of illegal trade are expected to be higher than those reported. Measures are proposed for improving data acquisition and transparency in analysis, but the ultimate responsibility for a meaningful monitoring and reporting system lies with the Parties to CITES. Data indicates that while criminals are increasingly using West and Central Africa as an exit point (namely Nigeria), ivory continues to be sourced from Southern Africa, including South Africa, Botswana, Zambia and Zimbabwe.[91,92,93]

The ETIS report prepared for SC74 considered "16,818 ETIS records from 68 countries spanning 2008 to 2020" and reported "a peak in ivory seizures in 2014 – 2015, after which there has been an overall decreasing trend in illegal ivory trade to 2020."[94] The ETIS report further elaborated that the 2020 data should be treated cautiously due to the pandemic and related factors and "may represent an unusual outlier year for global trade and illegal ivory trade activities."

The ETIS report also highlighted that "[i]n 2019, the third highest weight of ivory seizures for the period 2008 to 2020 was reported to ETIS, with three record-setting seizures recorded in 2019, each totalling 7.5 tonnes or more."

Analysis of ivory from "several recent seizures contained a predominance of tusks poached in the KAZA Transfrontier Conservation Area."[95]

The ETIS report to the 18th meeting of the Conference of the Parties (CoP18) identified Zimbabwe as a Category C Country of Concern and reported that Zimbabwe is one of the most important countries

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[89]   *CoP18 Doc. 69.3 (Rev. 1).* Report on the Elephant Trade Information System (ETIS). *Report by TRAFFIC to the Eighteenth meeting of the Conference of the Parties, CITES, Geneva (Switzerland), 17-28 August 2019*

[90]   *SC74 Doc.68.* Implementation of Resolution Conf. 10.10 (Rev. CpP18). *Report by the CITES Secretariat to the Seventy-fourth meeting of the Standing Committee Lyon (France), 7 - 11 March 2022*

[91]   *CoP18. Doc.69.3 (Rev.1); EIA (2020) Out of Africa; RUSI (2021) Illegal Wildlife Trade and Financial Investigations in West Africa*

[92]   *EIA (2020)* Out of Africa: How West and Central Africa have become the epicentre of ivory and pangolin scale trafficking to Asia. *Environmental Investigation Agency, London.*

[93]   *Reid A. & Williams M. (2021*) Illegal Wildlife Trade and Financial Investigations in West Africa. *RUSI Occasional Paper, April 2021, Royal United Services Institute for Defence and Security Studies, London.*

[94]   *SC74 Doc 68*

[95]   Wasser et al. (2022) ibid.

of origin of illegal commercial shipments of worked ivory destined for Asian markets[96]. Name seals, bangles, chopsticks, and pendants are among the typical seized products[97]. It is believed that there are Asian ivory carvers residing in the country active in the trade. Zimbabwe is identified as a major source of raw ivory, with 3,552 kg seized between 2015 and 2017. Of commercial worked ivory products exported from Africa between 2015 and 2017, Zimbabwe had the highest number of seizures and largest weight of total ivory products seized: 34 seizures weighing 1,403.71 kg, representing 23% of all seizures from African countries during this period. Together with Angola, the two countries accounted for two-thirds by weight and 83% by numbers of seizures destined for China, Hong Kong SAR or Viet Nam[98].

Considerable quantities of ivory have entered international trade from South Africa; however, most of the ivory seized from South Africa is believed to have come from outside the country. Seizure data indicated that raw ivory, albeit small quantities from Botswana, Malawi, Mozambique, and Zimbabwe have entered South Africa, thus raising concern about consolidation of illegal ivory for future illegal exports[99]. Underground ivory processing for exports occurs in South Africa. In 2017 a large-scale shipment of 2,478 kg to Viet Nam from South Africa was seized although most of the ivory is believed to originated from other countries. The comingling of different wildlife products, abalone, rhino horns, and elephant ivory, by transnational criminal groups remains an enforcement challenge in South Africa as a prominent exit point in the Southern African region for Asian markets.

Record seizures continue to be reported. The number of reported large-shipment seizures (greater than 500 kg) remained the same between 2017 and 2019. In fact, 2019 recorded the third highest weight of ivory seizures for the period 2008 to 2020 with three record-setting seizures, each totalling 7.5 tonnes or more. While there has been decrease in ETIS trends in recent years, such as in 2020, there is uncertainty about what caused the decrease in illegal ivory trade, whether it is due to enhanced enforcement, declining demand or the COVID pandemic[100]. Comparing 2018 and 2019 data to the data in the previous ETIS report, a total of 243 records were added to ETIS for the year 2018, and 392 records for 2019; these additions respectively represented a 24% and 44% increase in the number of seizures reported since the last report for a total of 1,250 and 1,288 records in 2018 and 2019, respectively[101].

CoP18 report showed that trade of ivory and other elephant parts/products remains a major concern in China and other Southeast Asian countries. Wildlife traffickers are believed to be stockpiling in Viet Nam, LAO PDR and Cambodia. Due to improved law enforcement efforts in Viet Nam and Lao PDR, evidence showed that Chinese-led open ivory market has now appeared in Cambodia appealing to Chinese, Vietnamese and Cambodian buyers.[102]

A radiocarbon study[103] in 10 countries across Europe, of ivory presented for sale as legitimate, found that 74% of the ivory tested was in fact fake antique ivory being sold illegally. The most recent ivory tested in the study was dated from after 2010. European countries, including France, the Netherlands, Belgium, Italy and Germany have been identified as transit points for raw and worked ivory and even places where raw ivory is transformed into carved ivory[104].

The report by TRAFFIC to SC70 in 2018 was nevertheless able to show, as reported in other ETIS assessments, that "*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.*" It also noted that there has been an apparent intensification of ivory processing in Africa for export of finished products to Asia, and that this changing aspect of the illegal trade needs more thorough assessment.

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[96]   *CoP18. Doc.69.3, Rev.1*

[97]   op.cit.

[98]   op.cit.

[99]   op.cit.

[100]   *CITES SC74. Doc.68*

[101]   *op.cit.*

[102]   *op.cit.*

[103]   *AVAAZ (2018)* Europe's Deadly Ivory Trade. Radiocarbon testing illegal ivory in Europe's domestic antique trade. *AVAAZ in collaboration with University of Oxford and Elephant Action League.*

[104]   Robin des Bois (2016) Surging European Union ivory exports. 26 September 2016. http://www.robindesbois.org/en/english-les-exportations-divoire-depuis-lunion-europeenne/

This flexibility underscores the way criminal networks operate as "multi-product firms" that are more versatile in reducing costs through scale economies (as evidenced by large-scale seizures), changing the sites of processing from destination to source countries, and adapting their transport networks to take advantage of regulatory loopholes and law enforcement deficiencies when the opportunity arises. The capacity of crime syndicates to circumvent controls is buttressed by their ability to move in several markets at the same time. Their involvement in a range of criminal enterprises also allows them to maintain their profitability through all the phases of the business cycle. The complex, specialized, and transnational nature of African supply chains is well documented[105].

In May 2022, the Democratic Republic of Congo authority conducted a sting operation leading to the arrest of three suspects who were allegedly active members of possibly the biggest network of ivory dealers in Africa. News articles reported that the suspects had imported more than 20 tons of ivory and more than 2 tons of rhino horns from Southern Africa in the last five years with items originating from Zimbabwe, South Africa and Zambia. The gang was connected to other criminal networks in South Africa, Zambia, Mozambique and other Southern African countries.[106]

Given this complexity and the continuing threats posed by the ivory trading establishment, this proposal would restore all African elephants to Appendix I. We believe this would send a clear signal to the world that trade in ivory is unacceptable. Such an unambiguous message and clear regulatory measure would assist agencies with combating the illegal trade in ivory.

6.5   Actual or potential trade impacts

Although the sales of ivory were promoted as a source of revenue that would be used for elephant conservation, and as a means to satisfy – and thus reduce – demand for ivory, it appears that the opposite has occurred. There are no rigorous studies with hard data on the resources generated by legal trade that have been re-invested in elephant conservation. In any event, it is clear that the financial requirements of adequate conservation schemes are considerable and that the products of legal trade have been and will remain insufficient.

Poaching has increased, and most dramatically following the second one-off sale in 2008[107,108]. Such sales give the false impression to consumers that ivory trade has been or will be legalized. Maintaining exemptions for jewellery and carved ivory has a similar effect. These exemptions are another loophole through which illegal ivory may find its way to the final consumer. The trade in ekipas in Namibia is an example: it was reported in 2007[109] that the strict registration and certification system promised by Namibia at CoP13 to control trade in ekipas had not been implemented. To their credit, the Namibian government imposed a moratorium on ekipa trade in September 2008[110] as part of a moratorium on trade in worked ivory pending enactment of the Controlled Wildlife Products Bill in December 2008 (see section 7.1 below)[111]. However, a news article in 2019 suggested that ekipas can be purchased within Namibia and exported with permits.[112]

At the same time, the growing strength of Asian economies, coupled with cultural values and state agencies' promotion of domestic markets[113], has allowed this consumer demand to grow steadily, independently of ivory supply; the treatment of ivory markets as simple supply-demand systems is a risky simplification. The MIKE programme found that demand for legally traded mammoth ivory, taken

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[105]   *Vira V. & Ewing T. (2014) Ivory's Curse*: The Militarization & Professionalization of Poaching in Africa. *Born Free USA and C4ADS.*

[106]   *https://news.mongabay.com/2022/05/ivory-from-at-least-150-poached-elephants-seized-in-the-drc-raid/?amp*

[107]   *Hsiang, S. & Sekar, N. (2016)* Does Legalization Reduce Black Market Activity? Evidence from a Global Ivory Experiment and Elephant Poaching Data. *NBER Working Paper Working Paper 22314, National Bureau of Economic Research, Cambridge, MA. http://www.nber.org/papers/w22314*

[108]   *CoP17 Inf. 96.* Evidence should be used in global management of endangered species: A reply to the CITES Technical Advisory Group. *Document submitted by Kenya on behalf of the African Elephant Coalition to the Seventeenth meeting of the Conference of the Parties Johannesburg (South Africa), 24 September – 5 October 2016.*

[109]   *Reeve, R., Pope, S. & Stewart, D. (2007)* Ivory, Ekipa and Etosha. The Hidden Cost to Elephants and Rhinos of Namibia's Wildlife Policy. *David Shepherd Foundation, May 2007.*

[110]   *http://allafrica.com/stories/200808210652.html*

[111]   *http://mg.co.za/article/2008-08-20-namibia-bans-ivory-trade*

[112]   *https://africanelephantjournal.com/ekipa-export-permits-still-required-shifeta-namibia/*

[113]   *http://voices.nationalgeographic.com/2014/10/22/legalizing-ivory-trade-taking-to-new-heights-a-dangerous-policy-proposal/*

as an indicator of demand for illegally traded ivory, was a strong predictor of the levels of illegal killing of elephants at MIKE sites[114]. With increasing demand, prices soared, creating even greater incentives for poachers. Even if prices are reduced through a legal market, this may lead to increased demand that will end up pushing prices upwards again. These effects are characteristic of all short-term business cycles present in most markets. Multi-product firms (or criminal syndicates) can endure these cycles without too much difficulty, but the elephant populations may not be able to do so. Although there may be some anecdotal evidence of a drop in price of legal ivory, this reduction will not necessarily affect the level of operations of the illegal trade and thus poaching will continue.

It has been possible to establish clear links between specific events, such as stockpile sales and changes in the levels of illegal killing[115]. The mechanisms behind the specific effects of such discussions on indices of consumer demand have not been studied, and it may be impossible to determine exact linkages. However, it does appear undeniable that the total ban on ivory sales in 1989 had the effect of rapidly and dramatically reducing the killing of elephants. Whereas the temporary nature of the 'moratorium' on proposals to trade in ivory from Appendix II elephant populations for nine years from 2008 is likely to have served as a signal to consumers that sales could be allowed after it ended in 2017. More importantly, it was likely to have signalled to traders and processors to maintain their levels of operation and even to engage in new investments. These market participants have an economic interest in acting to develop the market, not simply respond to it. As with any business enterprise, these traders are potent drivers of the market's expansion. Business history shows that markets are proactively promoted and developed by firms and government agencies[116].

China and the US agreed in September 2015 at Presidential level to "enact nearly complete bans on the import and export of ivory" and to take "timely and significant steps to halt the domestic commercial trade in ivory"[117]. The US enacted the ban in June 2016, while China's ban went into effect between March and the end of December 2017 with the closure of all official ivory processing and sales sites[118]. In January 2018, the Hong Kong SAR agreed to phase out its domestic ivory markets by the end of 2021[119], while Singapore's ban on domestic ivory trade came into effect in September 2021[120]. The EU banned the re-export of raw ivory for commercial purposes in July 2017[121], and in December 2021 took steps to prohibit commercial trade in raw ivory within the EU and worked ivory with narrow exemptions[122]. In December 2018, the UK adopted the Ivory Act 2018 to ban the sale of ivory in the UK with a limited number of exemptions[123], while Israel enacted stricter guidelines to close the commercial domestic and international trade in elephant and mammoth ivory on 1 January 2021[124].

In contrast, Japan's domestic ivory market remains open and was described by TRAFFIC as "one of the largest in the world"[125]. An active carving industry and major regulatory loopholes have enabled unregistered ivory to be sold to manufacturers, including "significant quantities" that have been illegally

[114]   *SC65 Doc 42.1.* Elephant conservation, illegal killing and ivory trade. *Report by the CITES Secretariat to the Sixty-fifth meeting of the Standing Committee Geneva (Switzerland), 7-11 July 2014.*

[115]   *CoP17 Inf. 96.* Ibid.

[116]   *The studies by Alfred Chandler and the Business History Group at Harvard University corroborates this point. See Chandler, A. (1990)* Scale and Scope. The Dynamics of Industrial Capitalism. *Harvard University Press.*

[117]   *https://www.whitehouse.gov/the-press-office/2015/09/25/fact-sheet-president-xi-jinpings-state-visit-united-states*

[118]   *SC70 Inf. 19.* Controls on domestic trade in selected Appendix I listed species. Part I: Elephant ivory Annex: Country profiles. An analysis of Domestic Controls in nine countries. *Document prepared by the Environmental Law Institute and submitted by the CITES Secretariat to the Seventieth meeting of the Standing Committee. Rosa Khutor, Sochi (Russian Federation), 1-5 October 2018, p.6*

[119]   *Gibson. L., Hofford, A., Dudgeon, D., Song, Y., Chen, Y., Baker, D.M. & Andersson, A. (2018) Hong Kong's delayed ivory ban endangers African elephants. Frontiers in Ecology and the Environment, 16:378-380.*

[120]   *https://www.theonlinecitizen.com/2021/09/02/singapore-completely-bans-domestic-trade-in-elephant-ivory-and-ivory-products/*

[121]   *http://ec.europa.eu/environment/cites/pdf/guidance_ivory.pdf*

[122]   *https://ec.europa.eu/commission/presscorner/detail/en/IP_21_6887*

[123]   *UK's response to Notification 2020/017in SC74.Doc.68 https://cites.org/sites/default/files/eng/com/sc/74/E-SC74-68.pdf*

[124]   https://cites.org/sites/default/files/eng/com/sc/74/E-SC74-39.pdf

[125]   *Kitade, T. & Nishino, R. (2017). Ivory Towers: An assessment of Japan's ivory trade and domestic market. TRAFFIC. Tokyo, Japan. Executive Summary. p. V*

exported to China[126]. Significant loopholes in the amended domestic regulatory framework persist[127]. TRAFFIC cites "considerable evidence to suggest it [Japan's domestic ivory market] is contributing to illegal trade" and has recommended that "legislative, regulatory and enforcement measures towards market closure" be taken[128].

The signal sent by restoring all African elephant populations to Appendix I would underpin the actions by China, Hong Kong SAR, Israel, Singapore, the US, the UK and the EU to date, and is expected to have a strong dampening effect on demand and a significant effect on the expectations of traders and processors who are key drivers of the market for ivory. It is consistent with the precautionary approach to trade in Annex 4 of Resolution Conf. 9.24 (Rev. CoP17) and will bring about the desired objective of reducing illegal killing of elephants.

7. Legal instruments

   7.1 National[129]

   Botswana: CITES entered into force on 12 February 1978. The most relevant domestic legislation is the Wildlife Conservation and National Parks (Hunting and Licensing) Regulations (Section 92) 10th August 2001, and in particular Reg. 34/39/40/41, and the Wildlife Conservation and National Parks Act 1992 which implemented CITES. This has been assessed as Category 2 under CITES, not meeting all requirements for CITES compliance[130] although some amendments have been submitted for consideration. Penalties for offences include fines of $300-$6,000+ and imprisonment of up to 15 years. The penalties may, in addition, incur forfeiture of proceeds of crime. Under the legislation, hunting is permitted by license, with restrictions on where hunting may take place, which animals may be hunted, the type of weapon, and others, although there are exemptions and loopholes. There are restrictions on import/export/re-export of trophies. There have been moratoria and/or bans on hunting over recent decades: elephant hunting was stopped in 1983 due to concerns that tusk weights were declining, and populations were retreating inside protected areas, and reinstated in 1996 with prescribed quotas; lion hunting was stopped during 2001-04 and again from 2008 to present; and hunting of all wildlife was banned in January 2014 because of perceived population declines and corruption in the distribution of revenues. However, the ban on hunting was lifted in May 2019 when the new President Mokgweetsi Masisi came into power who also reduced the firearms available to anti-poaching.[131]

   Namibia: CITES entered into force on 18 March 1991. Their principal domestic legislation (Category 1, 'believed generally to meet the requirements for implementation of CITES') was the Nature Conservation Ordinance (4 of 1974), which established controls on the hunting of wildlife, including elephants as "Specially Protected Game", on both state-owned and private land. The Nature Conservation Amendment Act, No. 5 of 1996, gave community conservancies the same rights as freehold landowners over the conservation and management, including hunting, of wildlife. In December 2008, Namibia enacted the Controlled Wildlife Products and Trade Act, followed in 2011 by Regulations, that together update the penalties for offences which would contravene CITES and specify the requirement for permits for possession of domestic or international sale of ivory. The Namibian Government has drafted a Protected Areas and Wildlife Management Bill for proposed consolidation and reform of the existing legislation. This Bill has been in preparation since 2016 and appears to still be finalized as of 2020.[132] Forfeiture legislation applies.

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126   *CoP17 Doc. 57.6 (Rev 1) Addendum.* Addendum to the Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory. *A report submitted by the CITES Secretariat on request by TRAFFIC to the Seventeenth meeting of the Conference of the Parties Johannesburg (South Africa), 24 September – 5 October 2016; p. 23*

127   *Kitade, T. & Nishino, R. (2017). ibid.*

128   *Kitade, T. & Nishino, R. (2017). ibid..*

129   *For legislation in Namibia, South Africa and Zimbabwe, see DLA Piper (2015) Empty threat 2015*: Does the law combat illegal wildlife trade? A review of legislative and judicial approaches in fifteen jurisdictions. *Royal Foundation and United for Wildlife.* *https://www.dlapiper.com/~/media/Files/News/2015/05/IllegalWildlifeTradeReport2015.pdf*

130   *https://cites.org/sites/default/files/documents/legislation-status/legislation-status.pdf*

131   *https://www.france24.com/en/20190523-botswana-lifts-ban-elephant-hunting-ivory-president-Mokgweeti-Masisi*

132   *https://www.na.undp.org/content/dam/namibia/docs/2020-docs/6303_Environmental%20and%20Social%20Management%20Framework%20Final%20CLEARED%20-PUBLIC%20DISCLOSURE%20.pdf*

South Africa: CITES entered into force on 13 October 1975. Legislative jurisdiction is split between national and provincial governments. South Africa's national legislation is classed as Category 1 by CITES. The most relevant legislation is the National Environmental Management: Biodiversity Act, 10 of 2004 (as amended), which put in place protection for threatened wildlife. It is supplemented by the Threatened or Protected Species Regulations 2007 and the National Norms and Standards for the Management of Elephants in South Africa (GN 251 (29/2/2008). The CITES Regulations (R.173 in GG3302 2010, amended in 2014), began formal implementation only in 2010, establishing management and scientific duties related to environmental affairs, conditions for international trade, registration requirements for individuals trading specimens internationally, and creating offences and penalties. Penalties are doubled for second and subsequent offences and there is provision for imposing a financial penalty equating to three times the value of the animal if protected. Forfeiture legislation applies.

Zimbabwe: CITES entered into force in Zimbabwe on 17 August 1981. Its principal legislation (Category 1) is to be found in the Parks and Wildlife Act 1975, amended 22/2001. Zimbabwe's obligations under CITES in relation to the export and import of ivory were established through the Parks and Wildlife (Import and Export) (Wildlife) Regulations SI 76/1998, which link to Section 129 of the Act. Section 128 of the Act specifies substantial penalties relating to the illegal trading in ivory. It also specifically prohibits the killing or hunting of Specially Protected Animals. Elephants are not designated as Specially Protected Animals; thus, mandatory custodial penalties under Section 128 only apply to illegal trade in ivory, not to offences involving illegal killing or hunting of elephants. The Act incorporates specific forfeiture provisions. In addition, the Environmental Management Act 13/2002 addresses environmental protection, which outlaws the cyanide poisoning responsible for recent poaching of elephants in Zimbabwe.

It should be noted that deterrent sanctions imposed by countries where poaching or trafficking is rampant are often weakened by overly lenient judicial action, including the granting of bail and judgments leading to releases of charged traffickers. This inconsistency between legislation and judicial action poses a significant threat to elephant populations.

7.2 International

In 1989, a decision was taken at CoP7 to list African elephants in Appendix I of CITES as a result of the poaching crisis of the 1970s-80s. However, the species was subsequently split listed when national populations from Botswana, Namibia and Zimbabwe were transferred to Appendix II in 1997, followed by South Africa in 2000. If IUCN's formal recognition of savanna and forest elephants as two separate species is transposed in the CITES Appendices, there are concerns that this taxonomic update could potentially spur proposals within CITES to reopen the international commercial trade in savannah African elephant ivory and further imperil the critically endangered forest elephants.

Article I of CITES defines species as "any species, subspecies, or geographically separate population thereof…". However, the elephant populations of Botswana, Namibia, South Africa and Zimbabwe do not constitute a "species" as defined by Article I of CITES. They are not a biologically accepted species in themselves, or a biologically accepted subspecies, or a geographically separate population. Elephants in these countries regularly migrate across borders (including into Mozambique, Angola, and Zambia) and there is a constant genetic exchange between the various southern African elephant populations. This creates a legal anomaly where the same herd of elephants may be listed in both Appendix I and Appendix II depending on which side of the border they happen to be at any given time. Since the African elephant populations of Botswana, Namibia, South Africa and Zimbabwe do not constitute a species as defined by Article I, they do not fulfil the criteria (as set out in that Article) for separate listing in Appendix II. The transfer from Appendix I to Appendix II therefore contravened the Convention. Returning all African elephant populations to Appendix I is necessary to correct this error and enable the CITES CoP to restore the appropriate legal framework for listing African elephants.

8. Species management

8.1 Management measures

Management measures for elephants vary greatly throughout the continent. They range from creation of migration corridors and transfrontier parks and conservation areas (e.g. the Great Limpopo Transfrontier Park and the Limpopo-Shashe and Kavango-Zambezi Transfrontier Conservation Areas), translocation of animals, creation of artificial waterholes, fencing and deterring animals from crops with, for example chilli peppers or beehives, to shooting of problem animals. Culling has not been employed

as a management tool since Zimbabwe halted the practice in 1988 and South Africa in 1995.

The prevailing narrative and, seemingly, official position in Zimbabwe on elephant ecology and management rests on the argument that the country's elephant numbers exceed the carrying capacity of some 45-50,000 animals, with ecological catastrophe the inevitable result[133]. This narrative is repeatedly used by commentators, government officials and politicians as a fundamental justification for consumptive use of elephants, including for the international trade in ivory and live animals[134].

The proposition rests, not on scientific evidence but on an aesthetic preference for a fixed state of nature, invariably with mature trees and scattered elephants[135]. According to a proponent of this command-and-control worldview, in an article absent of peer-reviewed scientific references[136], a density of 0.33 elephants/km^2 is the correct value for savanna elephant populations. In Hwange NP in Zimbabwe, and Kruger NP of old (but see below), a uniform density was maintained by widespread provision of artificial waterpoints accompanied by culling regimes[137]. This idea of a narrowly defined "magic number" has been inherited by successive government officials and repeated, without foundation, at countless meetings and endless documents relating to the trade in elephants and their products[138], while the evidence base has moved on.

There is no scientific support for the claims of "too many elephants" in Zimbabwe or elsewhere. Over the past few decades, wildlife ecologists, managers and commentators with respect for evidence have concluded that a rigid, predetermined "carrying capacity" figure for elephants is an antiquated concept[139]. It has little value in ecosystems and animal populations that are in constant flux in the face of environmental variability[140], a dynamic that is only likely to become more extreme in the face of climate change. It is now clear that the dense woodlands identified as the "pristine state" of nature by old-school wildlife managers were in fact the result of the near-extermination of elephants by the colonialist ivory trade[141].

The authorities of Kruger NP in South Africa[142], long wedded to a fixed density close to the figure pronounced correct in Zimbabwe, have recognized that the issues with elephants and biodiversity should more correctly focus on their role in creating landscape heterogeneity, removing artificial waterpoints and allowing densities to be high in some areas and low in others, without direct control of numbers[143]. Evidence-based elephant management promotes connectedness between populations through corridors of land[144], where rural communities participate in the management of conservation-compatible agricultural landscapes[145] in coexistence rather than human-elephant conflict resulting in

[133] *Maponga G. (2021) Zim's elephant population doubles.* The Herald, *25 May 2021.* *https://www.herald.co.zw/zim-elephant-population-doubles/*

[134] *Ndlovu M. (2022) Editorial comment: CITES must follow science on elephant trade.* The Herald, *19 May 2022.* *https://www.herald.co.zw/editorial-comment-cites-must-follow-science-on-elephant-trade/*

[135] *Henley M.D. & Cook R.M. (2019) The management dilemma: Removing elephants to save large trees.* Koedoe, *61(1): a1564.* *https://doi.org/10.4102/koedoe.v61i1.1564*

[136] *Martin, R. (2019) The Great Elephant Debate: Let's remove emotions and pseudo-science from wildlife management and get down to scientific facts.* Daily Maverick, *30 Jun 2019.* *https://www.dailymaverick.co.za/article/2019-06-30-the-great-elephant-debate-lets-remove-emotions-and-pseudo-science-from-wildlife-management-and-get-down-to-scientific-facts/*

[137] *Owen-Smith N., Slotow R., Kerley G.I.H., Van Aarde R.J. & Page B. (2006) A scientific perspective on the management of elephants in the Kruger National Park and elsewhere.* South African Journal of Science, *102(9): 389–394.*

[138] *Mutsaka F. (2022) Zimbabwe urges sale of stockpile of seized elephant ivory. ABC News, 17 May 2022.* *https://abcnews.go.com/International/wireStory/zimbabwe-urges-sale-stockpile-seized-elephant-ivory-84774342*

[139] *Kukura J. (2019) Elephant carrying capacity is an antiquated concept.* Wild Things Initiative, *24th November 2019.* *https://wildthingsinitiative.com/elephant-carrying-capacity-is-an-antiquated-concept/*

[140] *McLeod S.R. (1997) Is the concept of carrying capacity useful in variable environments? Oikos, 79: 529–542.*

[141] *Skarpe C., Aarrestad P., Andreassen H.P., Dhillion S.S., Dimakatso T., du Toit J.T., Halley D.J., Hytteborn H., Makhabu S., Mari M., Marokane W., Masunga G., Modise D., Moe S.R., Mojaphoko R., Mosugelo D., Motsumi S., Neo-Mahupeleng G., Ramotadima M., Rutina L., Sechele L., Sejoe T.B., Stokke S., Swenson, J.E., Taolo C., Vandewalle M. & Wegge P. (2004) The return of the giants: Ecological effects of an increasing elephant population. Ambio, 33(6): 276-282.*

[142] *SANParks (2012) Elephant management plan. Kruger National Park. 2013–2022. SANParks, Skukuza, South Africa.*

[143] *Ferreira S.M., Greaver C. & Simms C. (2017) Elephant population growth in Kruger National Park, South Africa, under a landscape management approach, Koedoe: 59(1), 1–6.* https://doi.or/10.4102/koedoe.v59i1.1427

[144] *Van Aarde R.J. & Jackson T.P. (2007) ibid.*

[145] *Songhurst A., McCulloch G. & Coulson T. (2016) Finding pathways to human–elephant coexistence: a risky business. Oryx, 50(4): 713–720.*

human losses and dead elephants.

Instead of repeatedly claiming that too many elephants are a problem to be solved only by killing elephants or turning them into commercial commodities, enlightened conservation authorities embrace the value of living elephants to ecosystems[146] (as noted in section 3.4 above) and to human livelihoods[147].

Currently, Zimbabwe has an updated Elephant Management Plan, Botswana is in the process of preparing a new Elephant Management Plan (which may be finalized by CoP19), Namibia does not have a current Elephant Management Plan, and South Africa has developed the Norms and Standards of Elephants in 2020.

8.2   Population monitoring

The ability of range States to monitor elephant populations varies greatly. The MIKE programme monitors populations and illegal killing at specific sites in several range States but is not intended to provide information on trends in total national or continental populations. The African Elephant Database stores data from elephant population surveys beginning in 1976. The most recent update of the database is the online 2015 African Elephant Database. The authors point out, however, that data quality varies considerably, depending, *inter alia*, on the methods used or the age of the data.

The Annex to the recent report to SC74 Doc 68 explains that AfESG will begin work on an updated status report in 2021 or 2022 that will cover 2016-2020. The Annex documents where population surveys are already occurring [page 39] with the bulk having taken place in South Africa and a few in Namibia.

8.3   Control measures

The ability of range States to manage elephant populations, to regulate legal take, and to prevent poaching, varies greatly. A number of steps have been taken in recognition of the urgency for action to stem wildlife crime, involving not only elephants but also a wider range of species.

The report to SC66 in January 2016[148] describes a number of areas where efforts have been made to improve cooperation on the control of wildlife crime. At CoP16 in March 2013, Decision 16.78, paragraph a) called for the Secretariat to convene a CITES Ivory Enforcement Task Force. The Secretariat was not able to raise the funds necessary to convene such a Task Force, but its objectives were considered to have been partially/largely met through the development and implementation of National Ivory Action Plans (NIAPs) – see below – and targeted support from, and collaboration with partners from the International Consortium on Combating Wildlife Crime (ICCWC). The decision was taken at CoP17 to replace the idea of the Task Force with a meeting of Parties concerned by the development and implementation of NIAPs, in cooperation with ICCWC partner organizations and, as appropriate, other Parties and experts[149].

A range of international organisations have become increasingly engaged in tackling wildlife crime. The United Nations Office on Drugs and Crime (UNODC), on behalf of ICCWC, led the development of "*Guidelines on methods and procedures for ivory sampling and laboratory analysis*", which were finalized and released in November 2014[150] in support of the deployment of forensic technology to combat elephant poaching, and were followed up with a global review of forensic laboratory capacity to inform a broader project of combatting wildlife crime implemented by UNODC. The Lusaka Agreement[151], with seven Parties and three additional signatories, came into force in 1996; the Lusaka Agreement Task Force (LATF) was set up to implement its objectives in 1999. Its objectives are to support the member states and collaborating partners in reducing and ultimately eliminating wildlife

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[146]   Fritz H. (2017) Long-term field studies of elephants: understanding the ecology and conservation of a long-lived ecosystem engineer. *Journal of Mammalogy, 98(3): 603–611.*

[147]   Mamboleo A.A., Doscher C. & Paterson A (2017) *Are elephants the most disastrous agricultural pests or the agents of ecological restoration? Journal of Biodiversity and Endangered Species. 5: 185-194.* https://doi.org/10.4172/2332-2543.1000185

[148]   *SC66. Doc 47.1*

[149]   *CoP17 Dec. 17.80*

[150]   *https://cites.org/eng/ICCWC_guidelines*

[151]   *http://lusakaagreement.org/*

crime through facilitating cooperation in law enforcement, investigations, information exchange, and capacity building. In August 2020, the CITES Secretariat, together with TRAFFIC and WWF, published the 4th edition of the *Identification Guide for Ivory and Ivory Substitutes*, as a resource to assist law enforcement to identify the most commonly found ivories and artificial substitutes in trade.[152]

Through funding from the Secretariat, the World Customs Organization (WCO) organized a workshop on "Controlled Deliveries of Illegally Traded Wildlife Products" in Bangkok in January 2015, with follow-up training involving deployment of customs officers from China to Kenya and South Africa. In 2014, INTERPOL implemented Project WAYLAY in close cooperation with its ICCWC partners, focusing on developing capacity and supporting information exchange necessary to organize controlled deliveries of wildlife products. In its first phase it focussed on elephant ivory and rhinoceros horn. It has helped to establish an international network of experts, harmonize procedures and develop guidance. Since 2017, INTERPOL has conducted annual operations targeting wildlife trafficking, under the banner of Operation Thunderball. The most recent Operation took place in October 2021, coordinated by INTERPOL and the World Customs Organization. The operation resulted in worldwide seizures of animal and forest products, including almost 1 tonne of ivory and ivory products.[153] The United Nations General Assembly (UNGA) in July 2015 unanimously adopted a Resolution on 'Tackling Illicit Trafficking in Wildlife', which calls upon Member States, *inter* alia, to make illicit trafficking in protected species of wild fauna and flora involving organized criminal groups a serious crime.

Resolution Conf. 10.10 (Rev. CoP17) urges Parties to maintain an inventory of government-held stockpiles of ivory and, where possible, of significant privately held stockpiles of ivory within their territory and report on them annually to the Secretariat. On 20 December 2021, the Secretariat issued Notification to the Parties No. 2021/007 to remind Parties of the above reporting obligation. While 22 Parties informed the Secretariat of stockpiles of ivory in their territory, 44 were inferred to have stockpiles but had not declared them[154]. Meanwhile, a number of other countries have inventoried and destroyed their stockpiles. At SC65, the Standing Committee encouraged all Parties in whose territory legal ivory markets exist or that export pre-convention raw elephant ivory for commercial purposes, to provide wholesale price data on such sales of raw ivory to the Secretariat, for integration into MIKE and ETIS analyses.

At the 17th meeting of the Conference of the Parties (CoP17, Johannesburg 2016), the Parties agreed by consensus to revise Resolution Conf.10.10 and recommended that all Parties and non-Parties in whose jurisdiction there is a legal domestic market for ivory that is contributing to poaching or illegal trade to close their domestic markets for commercial trade in raw and worked ivory as a matter of urgency. Since then, except for outliers such as Japan, numerous ivory consumption countries have closed their markets or are making progress towards market closures.

In addition to these international efforts, the implementation of targeted National Ivory Action Plans (NIAPs)[155] is intended to enhance the national implementation of CITES provisions. There are currently five "category A" Parties (most affected by the illegal trade in ivory) participating in the NIAP Process and nine "category C" Parties (affected by the illegal trade in ivory) in both the poaching of elephants (source countries) and the illegal trade in ivory (transit and end consumer countries) who have been directed by the Standing Committee to develop and implement NIAPs. These countries are required to report their progress in NIAP development and implementation to the Secretariat. Though Zimbabwe and South Africa are not currently undergoing the process, they are included in category B as Parties affected by illegal trade in ivory and should be required to develop NIAPs.[156]

The African Elephant Action Plan (AEAP) was approved by African elephant range States in 2010 at CITES CoP15, and the African Elephant Fund was established to support the implementation of the AEAP[157]. International donors and range States are encouraged to back this initiative, through technical and financial support, and National Elephant Action Plans (NEAPs) are being developed as a result.

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152   https://www.traffic.org/news/cites-traffic-and-wwf-release-new-guide-to-identify-smuggled-ivory/

153   https://www.interpol.int/en/News-and-Events/News/2021/Global-arrests-and-seizures-INTERPOL-WCO-operation-strikes-wildlife-and-timber-trafficking-networks

154   https://cites.org/sites/default/files/eng/com/sc/74/E-SC74-61-02.pdf

155   SC66 Doc. 29 (Rev.1). National Ivory Action Plans Process.

156   https://cites.org/eng/niaps

157   CoP15 Inf. 68, African Elephant Action Plan.

The Elephant Protection Initiative (EPI)[158] was launched in 2014 by Botswana, Chad, Ethiopia, Gabon and Tanzania, with the intention of bringing African Elephant range States, non-range States, intergovernmental organisations, NGOs, private sector and private citizens together to work in partnership to protect elephants and stop the illegal ivory trade. 21 African elephant range states have joined. Activities include support for the development of NEAPs, as well as domestic legal frameworks and international actions limiting the ivory trade at both demand and supply ends of the chain, inventory and destruction of ivory stockpiles, education and fund-raising.

Despite these many efforts, the rate of elephant killing has remained high. The relative failure of efforts to date may be attributed to the scale of the problem of combatting well-organised international criminal networks. The coordination at different levels should be sustained and strengthened

8.4 Captive breeding and artificial propagation

Captive breeding presents no direct benefit to *in situ* conservation of African elephants[159] and is therefore not relevant to this proposal.

8.5 Habitat conservation

African elephants occur in a number of protected areas, but these account for only 31% of their range; almost 70% of the species range is believed to lie outside protected areas[160].

8.6 Safeguards

These are not applicable since the proposal would result in the listing of all African elephants in Appendix I.

9. Information on similar species

The Asian elephant (*Elephas maximus*) has been listed in CITES Appendix I since 1976. The Jakarta Declaration for Asian Elephant Conservation in 2017 attended by all of the 13 Asian elephant range states expressed continued concern that the future of Asian elephants is challenging with the loss of habitat, fragmented populations, high levels of human-elephant conflict, poaching and other factors in most of the range states.[161]

The report to SC74 showed that the skin trade in Asian elephants has increased in recent years, further threatening the fragile populations, especially in Myanmar. Illegal ivory and skins can be found for sale along the Myanmar/China border and extended to Cambodia, Laos and Viet Nam. An extremely worrying trend is the mixed use of ground pangolin scales with powdered elephant skin in medicine pills.[162]

Illegal killing of Asian elephants continues in Southeast and South Asia as documented in the SC74 report. In Myanmar, 127 poaching cases were reported between 2012 and 2019 while 23 cases were reported in Peninsular Malaysia and 145 elephant deaths were reported in Borneo Sabah. 139 illegal killing of elephants were reported in India between 2010 and 2019.

Poaching for ivory and illegal trade remains a threat to the small and fragmented populations in many Asian countries. As only male Asian elephants carry tusks and the sex ratio of many populations has been skewed through selective poaching in the past, increased demand for ivory will have a particularly devastating effect. In Myanmar, there is an emerging threat posed by the illegal killing of Asian elephants for their skins that adds to pressure on populations from ivory poaching.

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158   http://www.elephantprotectioninitiative.org/about/

159https://www.iucn.org/about/work/programmes/species/who_we_are/ssc_specialist_groups_and_red_list_authorities_directory/mammals/african_elephant/statements/captive_facilities/

160   Blanc et al. (2007) ibid.

161   The Jakarta Declaration for Asian Elephant Conservation. April, 2017.

162   SC74. Doc.68.

Illegal trade of live elephants remains a high concern. In May 2022, a CITES Notification was issued to inform the Parties of suspension of trade in live Asian elephants with Lao PDR.[163]

The Asian elephant would therefore benefit from a comprehensive Appendix I listing for both species, and it would improve the prospects for enforcement coordination between African and Asian elephant range States in combatting illegal trade

10. Consultations

This proposal was sent by the CITES Management Authority for Burkina Faso to the Management Authorities of Botswana, Namibia, South Africa and Zimbabwe on 9 June 2022 to seek their comments. As of 14 June 2022, no comments had been received. If comments are received after this date, they will be forwarded to the Secretariat.

11. Additional remarks

The full biological criteria are comfortably met if all African elephant populations are considered as a whole. While individual country populations may be listed separately in Appendix II under the listing criteria in Resolution Conf. 9.24 (Rev. CoP17), the Resolution cautions against split listing, stating: "Listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates". Moreover, the Convention clearly envisages that listed species will have a single status under CITES. The AESR 2016 shows there has been a decrease in elephant numbers for the first time across southern Africa, including in 3 of the 4 Appendix II countries. The PIKE value for the whole of southern Africa remained close to the 0.5 threshold in recent years. A cause for concern is the evidence pointing to ivory processing in southern Africa for worked ivory products, such as name seals, chopsticks, bangles, destined for Asian markets. The level of threat is clearly increasing across the region, and while numbers of elephants in Namibia may have increased, since surveys were not coordinated with Botswana, which showed a decrease, it is possible that both populations decreased or, at best, did not increase. As well as the enforcement problems caused by a mixed listing, trade or the prospect of trade by any range States will stimulate demand in consumer countries that puts pressure on the elephant protection agencies of all African countries. A consensus on a unified Appendix I listing will help to relieve that pressure and provide the greatest protection for the African elephant across its range.

We recognize the importance of conservation incentives for local communities, whose agricultural livelihoods should clearly be supported within national development frameworks, and whose partnership is essential for effective and sustainable conservation of biodiversity. However, the success of community-based conservation is in no way dependent on international ivory sales, which are never likely to play any significant role in the development of community engagement in wildlife-related benefit-sharing, conservation-compatible rural land use, and protection of wildlife from illegal trade.

It is highly questionable whether the ivory trade is even an economically sustainable way to utilize elephants and whether revenues from the trade in ivory have made any contribution to elephant conservation. The higher social costs involved in policing the trade, including monitoring costs for MIKE and ETIS, increased costs for anti-poaching and national law enforcement, technical missions to exporting and importing countries and so on, may well exceed benefits. Securing stockpiles involves significant costs and risks that may increase if trade is legalized.[164] At the national level, the potential net revenue from ivory stockpile sales appear to be likely small when weighed against the increased management and monitoring costs, and compared to revenue from other sources of rural income, whether wildlife-related or otherwise.[165]

While there have been substantial improvements in control measures aimed at breaking the supply chain for illegal ivory, it remains more important than ever to reduce the demand at the consumer end. This is

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[163] CITES Notification No.2022/030.
[164] Harvey, R., Alden, C., & Wu, Y. S. (2017). Speculating a fire sale: options for Chinese authorities in implementing a domestic ivory trade ban. Ecological Economics, 141, 22-31; See also https://cites.org/sites/default/files/eng/prog/elephant/Stock_management_guidance.pdf ; https://cites.org/sites/default/files/eng/com/sc/70/E-SC70-49-01.pdf
[165] The biologically sustainable yield of ivory (e.g. annual change in stockpiles) is unknown, but it would hardly be larger than a few tons per year, producing a handful million US$. In contrast, MIKE and ETIS costs are already in the range of $4.7 US$ million per year (see SC74 Doc. 12 Annex 6 and SC74 Doc. 13 Annex 1), which is only a fraction of the required yearly budget for protected areas. In comparison, the World Travel and Tourism Council estimated that wildlife tourism contributed directly with US$120.1 billion in GDP to the global economy in 2018 (WTTC (2019), The Economic Impact of Global Wildlife Tourism (Issue August). https://www.atta.travel/news/2019/08/the-economic-impact-of-global-wildlife-tourism-wttc/).

incompatible with a partial trade in ivory, or leaving the door open for its resumption at a future date. A unified pan-African approach, listing all of Africa's elephants in Appendix I, sends a clear signal to consumers and criminal syndicates that international ivory trade is, and will remain, prohibited. Trade in hunting trophies would continue to be allowed (with the appropriate permit) under the full Appendix I listing proposed in this paper.

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