



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington, D.C. 20240



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MEMORANDUM

To: Chief, Division of Management Authority

From: Chief, Division of Scientific Authority *Rosemarie Gram*

Subject: General Advice on Importation of Sport-hunted Trophies of African Elephants taken in Tanzania in the Calendar Year 2014

This General Advice represents our CITES finding for permit applications that you might receive for the import of sport-hunted trophies of African elephants (*Loxodonta africana*) taken in the United Republic of Tanzania (Tanzania) in calendar year 2014.

Please be advised that, based on the available information, we are **unable** to determine that the importation of sport-hunted trophies of African elephants taken in Tanzania during calendar year 2014 will be for purposes that are not detrimental to the survival of the species.

If permit applications are received that include new or additional information showing that elephant management practices by the Government of Tanzania have led to the sustainability of its elephant population on a nation-wide basis, these applications should be referred to the Division of Scientific Authority for consideration on a case-by-case basis.

BASIS FOR ADVICE:

Since our analysis for the General Advice issued for calendar year 2013, several sources of information have become available indicating a significant decline in Tanzania's elephant population primarily due to poaching for ivory, including:

- *Aerial census of large animals in the Selous-Mikumi ecosystem, population status of African elephant* (TAWIRI 2013a);
- *Aerial census of large animals in the Ruaha-Rungwa ecosystem, population status of African elephant* (TAWIRI 2013b);
- A written report, *Recognition and tackling of the current elephant poaching crisis in Tanzania* (TEPS 2013a) and PowerPoint presentation, *Tackling the elephant poaching crisis in Tanzania* (TEPS 2013b), by the Tanzania Elephant Protection Society (TEPS) Task Force presented to the Parliamentary Committee of Land, Natural Resources and Environment, April, 2013;

- A report to the African Elephant Summit (Botswana, 2013), *Status of African elephant populations and levels of illegal killing and the illegal trade in ivory: A report to the African elephant summit* (CITES Secretariat et al. 2013);
- A report to the 16th Meeting of the CITES Conference of the Parties (CoP16 - Bangkok, Thailand, 2013), providing an update on Monitoring the Illegal Killing of Elephants (MIKE) (CoP16 Doc. 53.1), posted 11/30/2012, with an Addendum posted 2/19/2013; and
- A report to CoP16 (Bangkok, Thailand, 2013), providing an update on monitoring of illegal trade in ivory and other elephant specimens (CoP16 Doc. 53.2.2 (Rev. 1)), originally posted 12/12/2012, with a revision of the document posted 2/8/2013.

The new information provided by these sources is discussed below as it relates to our finding for the 2014 calendar year.

Conservation and Management

1. As recently as a few years ago, African elephants were considered to be widely distributed throughout Tanzania. As of 2009, they covered about 39% of the country's total land surface area (~370,000 square kilometers (km²)) (TAWIRI 2010) within six ecosystems, including: Tarangire-Manyara, Serengeti, Selous-Mikumi, Ruaha-Rungwa, Katavi-Rukwa, and Moyowosi-Kigosi (CoP15 Doc. 68, Annex 6a). The Selous-Mikumi ecosystem represented about 40% of the total elephant population in Tanzania (CoP15 Doc. 68, Annex 6a). At 31,040 square miles, the Selous-Mikumi ecosystem is Africa's largest protected area, and historically held East Africa's largest elephant population, followed by Ruaha-Rungwa (13,384 square miles) (Jones and Nowak 2013).

2. According to the Government of Tanzania, about 50% of the elephant's range in that country is in protected areas (PA) (CoP16 Prop. 11). This proportion of protected range is relatively high compared to other African elephant range countries (Blanc *et al.* 2007). These protected areas comprise about 28% of the country's land area, and elephants receive full protection in 19% of Tanzania's total land surface area (CoP16 Prop. 11). The network of PAs includes national parks (NP), Ngorongoro Conservation Area, game reserves (GR), game controlled areas (GCA), and wildlife management areas (WMA) in village lands. In the year 2012, Tanzania put into place Wildlife Management Area Regulations (2012), which provided a legal mechanism to promote the establishment of wildlife conservation areas outside of PAs administered by the central government. These regulations allow local communities to establish wildlife management areas in village lands that offer conservation potential for wildlife. This legal mechanism has the potential to enable local communities to contribute to wildlife conservation and to benefit from conservation activities on their land (CoP16 Prop. 11). Concerns have been raised, however, that WMAs have not effectively contributed to conservation (TEPS 2013a). The legal process developed by the Wildlife Department has been criticized as being complicated, overregulated, and lengthy, resulting in high transaction costs and making

compliance difficult. It is suggested that in order to make the WMA approach successful, it will need to be simplified (Baldus and Hahn 2009).

3. Historically, there have been transboundary elephant populations in the Kilimanjaro-Amboseli, the Serengeti-Mara, and Tsavo-Mkomazi ecosystems along the Tanzania-Kenya border (Blanc *et al.* 2003), and elephants have moved between the Selous in Tanzania and the Niassa in Mozambique (Mpanduji *et al.* 2002). Tanzania also shares elephant populations with Rwanda – the Burigi Game Reserve in Tanzania and Akagera National Park in Rwanda (TAWIRI 2010). Tanzania cooperates with transboundary countries, especially Kenya and Mozambique, in cross-border law enforcement efforts (CoP16 Prop. 11); however, concern has been raised over the lack of effectiveness of cross-border cooperation in anti-poaching efforts (Baldus and Hahn 2009).

4. According to the Government of Tanzania (Tarimo, Severre, and Mduma, *in litt.* 2011), the following legal instruments govern wildlife conservation in Tanzania:

- Wildlife Policy, 2007, which provides guidelines for the management of African elephants through the development, review, and updating of specific management plans (CoP15 Doc. 68, Annex 6a);
- Wildlife Conservation Act No. 5 of 2009;
- Tanzania National Parks Act CAP. 282 (RE 2002); and
- Ngorongoro Conservation Area Act CAP. 284 (RE 2002).

5. Four different institutions have authority for management of wildlife in Tanzania:

- Tanzania National Parks (TANAPA), a Parastatal organization that manages 15 national parks (total area of 50,872 km²);
- Ngorongoro Conservation Area Authority (NCAA), a Parastatal organization that manages the Ngorongoro Conservation Area (NCA) (total area of 8,300 km²);
- Wildlife Division, an institution that manages 28 game reserves with an area of 112,564 km², about 38 game controlled areas with an area of about 161,521 km², and RAMSAR sites covering 249,856 km²; and
- District Councils, local government institutions that collaborate with the Wildlife Division on wildlife conservation issues and facilitate the establishment and management of WMAs on village land (Tarimo, Severre, and Mduma, *in litt.* 2011).

6. Tanzania developed its country-level strategy and action plan, the “Tanzania National Elephant Management Plan 2010-2015” in 2010, and the plan was endorsed by the Minister for Natural Resources and Tourism on January 15, 2011. This plan provides updated information on several biological and ecological topics, including: distribution and range, abundance, population trends and demography, elephant corridors, and human-elephant conflicts. It identifies nine different strategic objectives, as well as numerous specific objectives and their associated targets, actions, timelines, actors, and indicators. The strategic objectives include: Human-Elephant Conflict, Elephant Corridors, Law Enforcement, Benefits and Sustainable Utilization, Ivory Stockpile and Management System, Research and Monitoring, Elephant Health

and Welfare, Cross-border Cooperation, and Elephant Information Management (TAWIRI 2010). It is unclear whether or to what extent the National Elephant Management Plan has been implemented to date.

7. The Tanzania National Elephant Management Plan 2010-2015 (TAWIRI 2010) identified that a substantial decrease in funding is an important factor that has influenced the protection of the elephant population in the Selous ecosystem. Prior to 2005, a Revenue Retention Scheme was being implemented in which 100% of the revenue from photographic tourism and 50% from hunting operations was retained for management of the Game Reserve (TAWIRI 2010). By 2003, the revenue had risen to USD 2,800,000, but following national budget reductions in 2004, the amount retained by the Reserve had dropped to about USD 800,000 by 2008 (UNEP 2008, as cited in TAWIRI 2010). The timing of the decrease in funding coincides with increased poaching in the Reserve, suggesting that anti-poaching operations are greatly under-funded (TAWIRI 2010). It has been reported that the Tanzanian Government terminated the Selous Revenue Retention Scheme following the end of the Tanzanian-German Selous Conservation Program in 2003 (Baldus and Hahn 2009).

8. In addition to concerns about the implementation of Strategic Objective 3, Law Enforcement, we are concerned about implementation of Strategic Objective 8, Elephant Utilization, which includes as an action item to, "Set realistic hunting quotas." Since 2007, the annual CITES export quota for Tanzania has been 400 tusks (sport-hunting quota of 200 elephants). During 2003-2006, the quota was 200 tusks from 100 individuals, while during 1997-2002 the quota was 100 tusks from 50 individuals (<http://www.cites.org/eng/resources/quotas/index.php>). Based on the available information, Tanzania's elephant population is now less than 70,000 elephants nation-wide (see paragraph 16), and according to the population trends shown in the Tanzania National Elephant Management Plan 2010-2015 (p. 10), the population has not been this low since the 1990's. According to the graph, the population in 1999 was estimated at about 75,000 elephants (TAWIRI 2010). During this time period, the quota was 100 tusks from 50 individuals, and the population appeared to be showing an increasing population trend. Despite the ongoing population decline and current estimated population figure, Tanzania has not adjusted its national export quota downward in response.

9. In Tanzania, the only consumptive use of African elephants is sport hunting (CoP16 Prop. 11), which is covered by The Wildlife Conservation (Tourist Hunting) Regulations, 2010 (Government of the United Republic of Tanzania 2010). These regulations control hunting by concession area, season, minimum trophy sizes (18 kg and 160 cm per tusk), annual quotas, post-hunt reporting, trophy registration, marking, and export requirements (CoP15 Doc. 68 Annex 6a; Part V, Regulation 24.-(5)(b)). According to the Government of Tanzania, sport hunting quota determinations for different areas take into account the density of elephants in those ecosystems (CoP16 Prop. 11).

10. According to Tanzania's proposal submitted (and later withdrawn) to CoP16 (CoP16 Prop. 11), 25% of the revenue accrued from the sport hunting and 100% of the revenue from resident

hunting goes to District Councils to support community development projects and conservation activities. In addition, 65% of the revenue from photographic tourism and 75% of the block fee in WMAs is given back to local communities. More than 90% of the revenue of the Tanzania Wildlife Protection Fund is generated from fees associated with sport-hunting and the sale of trophies. Law enforcement activities for wildlife and wildlife products, including ivory, are largely subsidized by the Tanzania Wildlife Protection Fund (CoP16 Prop. 11).

11. Despite the legal and management tools available to Tanzania for managing its elephant populations, population trends and data collected under the CITES program known as Monitoring the Illegal Killing of Elephants (MIKE) show, as discussed below, that elephant populations throughout Tanzania are declining, primarily due to rampant poaching. This ongoing crisis raises questions about the effectiveness of Tanzania's management and governance to protect elephants, particularly with respect to Strategic Objective 3, Law Enforcement, in the National Elephant Management Plan. In its findings on Tanzania's CoP15 (2010) proposal to down-list its elephant population from CITES Appendix I to Appendix II (Note: the proposal was rejected), the Panel of Experts questioned the commitment by Tanzania to combat poaching, raising concerns over the financial mechanism by which the Wildlife Division was funded. The Wildlife Division's revenue share is paid directly to the central Treasury, and the Treasury is then supposed to distribute the budgeted monies to the Wildlife Division. The Panel of Experts raised the concern that over a 3-year period (2007-2009), the Wildlife Division had received only 63% (USD 2,634,975 per year) of its approved budget from the central Treasury. The Panel noted that given these funding limitations, the Wildlife Division would not be able to meet its needs and obligations regarding the conservation, management, and protection of African elephants. The Panel of Experts also noted, however, that between 2005 and 2009, the Tanzania Wildlife Protection Fund contributed on average a total of USD 12,894,564 annually to the Wildlife Division. According to the Panel of Experts, these funds, when combined with the Treasury allocations, should have put the Wildlife Division in a "strong position" to meet its enforcement obligations, including containment of threats to elephants in the Selous-Mikumi ecosystem (CoP15 Doc. 68, Annex 6a). Reported elephant poaching levels in the Selous-Mikumi ecosystem, however, suggest that enforcement was inadequate.

12. Tanzania's high Proportion of Illegally Killed Elephants (PIKE) values indicate high poaching rates, which suggests weak governance in Tanzania (see paragraph 16 for PIKE values). Repeated analyses under the CITES MIKE program have identified that at the national level, governance, as measured by Transparency International's Corruption Perceptions Index (CPI), is the factor most strongly correlated with PIKE. Poaching levels are higher in countries where governance is weaker, and vice versa. It is suggested that poor governance likely facilitates the illegal killing of elephants and movement of illegal ivory by ineffective law enforcement and/or "active aiding and abetting by unscrupulous officials" (CITES Secretariat *et al.* 2013).

13. The MIKE analyses are consistent with information available from the Elephant Trade Information System (ETIS), a global illegal elephant trade tracking system operated by

TRAFFIC on behalf of the CITES Parties. According to an analysis of data from the ETIS presented at CITES CoP16, Tanzania was implicated as a significant player in the illegal ivory trade. In the ETIS analysis presented at CoP15, Tanzania was already identified as a country of concern with respect to large consignments of illicit ivory leaving the African continent. In the intervening three years, the ETIS data show that both Kenya and Tanzania continued to be the primary conduits for large shipments of ivory exported to Asia, together accounting for nearly half of the 34 large-scale ivory seizures by number and 58% of the associated weight of such seizures during the period 2009-2011 (CoP16 Doc. 53.2.2 (Rev. 1)). A recent TRAFFIC news article, drawing on ETIS data, reports that since 2009 Tanzania has made or been implicated in 18 large-scale ivory seizures (i.e., seizures that involved 500 kg or more in a single shipment). Of these seizures, Tanzania only made five, while the other 13 seizures were made outside of the country. In total, these seizures represented nearly 43 tons of ivory, representing the death of about 4,000 elephants (<http://www.traffic.org/home/2014/1/27/tanzania-reshuffled-cabinet-should-address-poaching-urgently.html>). Such large-scale transactions of ivory represent higher-level criminal activity, and the ETIS report to CoP16 suggests that governance issues could be responsible for Tanzania's low seizure and reporting rates (CoP16 Doc. 53.2.2 (Rev. 1)).

Population Distribution, Status and Trends

14. New census information was made publicly available in early 2014. The results of back-to-back aerial surveys of the Selous-Mikumi and Ruaha-Rungwa ecosystems in October through November of 2013 show significant population declines (TAWIRI 2013a and 2013b) in both of these ecosystems. The Selous-Mikumi survey revealed an estimate of 13,084 ($\pm 1,816$ SE) elephants, the lowest figure reported in this area since surveys began in 1976 (TAWIRI 2013a). This figure is down from an estimated 38,975 ($\pm 2,644$ SE) elephants in 2009 (TAWIRI 2009, *as cited in* TAWIRI 2013a), a decline of about 66%, which is significant (d -test = 8.07, $p > 0.05$) (TAWIRI 2013a). The Ruaha-Rungwa survey revealed an estimate of 20,090 ($\pm 3,282$ SE) elephants (TAWIRI 2013b), down from an estimated 31,625 ($\pm 2,890$ SE) elephants in 2009 (TAWIRI 2010, *as cited in* TAWIRI 2013b), a decline of about 36.5%, which is significant (d -test = 2.6, $p > 0.05$) (TAWIRI 2013b).

15. The latest update to Tanzania's population information in the African Elephant Database (http://www.elephantdatabase.org/preview_report/2013_africa/Loxodonta_africana/2012/Africa/Eastern_Africa/Tanzania) provides a best estimate for the year 2012, but does not reflect the new survey information discussed above from 2013. According to the 2012 estimate, the "definite" category estimate was 95,351 elephants, in addition to 10,278 "probable," 10,927 "possible," and 900 "speculative" category estimates. The new survey information would reduce the population estimate by about 37,426 individuals. Additional information below suggests that an updated population estimate would be revised downward even further.

16. Other information that indicates elephant populations are declining throughout Tanzania, includes:

- a) Demographic surveys of the Katavi-Rukwa and Ugalla populations in 2009-2010 suggested that these populations were in distress. Survey results revealed that in each of these populations, the proportion of the herd less than 5 years of age was below 30% (TAWIRI 2010). These results are indicative of low recruitment and growth rates, suggesting one or more population stressors, such as higher infant mortality or increased stress associated with human-elephant conflict or illegal activity (i.e., poaching) (CoP15 Doc. 68, Annex 6a).
- b) Anecdotal reports presented at a stakeholders meeting¹ held in Dar es Salaam (January 2013) to address elephant and other wildlife poaching issues in Tanzania (TEPS 2013a and 2013b) indicate that:
 - the Moyowosi population in northwest Tanzania may have been extirpated;
 - the population in the Ugalla ecosystem in western Tanzania is becoming unviable, with less than 500 elephants left;
 - the Katavi-Rungwa-Ruaha population in central Tanzania has been decimated by poachers;
 - elephants are almost absent from the Matambwe photo-tourism sector of the Selous Game Reserve and from the Kilombero Valley in southern Tanzania;
 - elephants in the southern Selous Game Reserve and Selous-Niassa corridor are being decimated by poachers;
 - Tanzania has lost 50% of its elephant population since 2007; and
 - the national population estimate is <70,000² elephants (*versus* 109,000 elephants in 2009 (TAWIRI 2010) and that if this rate of poaching continues, it is estimated that elephants will be extirpated from Tanzania within seven years.
- c) Although Tarangire National Park in northeast Tanzania was cited in 2010 as having one of the highest growth rates (6%) ever recorded for an African elephant population (Foley and Faust 2010), it has been reported that since December 2011, there has been ongoing massive organized poaching within the park that has resulted in the illegal killing of at least 30 elephants in the year 2012 alone (Kideghesho *et al.* 2013). Demographic surveys of elephants from the Serengeti ecosystem during 2009-2010 were also indicative of good growth rates; however, the January 24, 2014, seizure of six pieces of elephant tusks in the Tarime District bordering the northern part of Serengeti National Park is an indication that not even the Serengeti ecosystem is free from poachers (<http://allafrica.com/stories/201402070291.html>).
- d) Consistent with the population and anecdotal information available, recent information from the CITES MIKE program also suggests widespread population declines in

¹ This meeting was convened by the Tanzanian Elephant Protection Society (TEPS) and was attended by representatives from the Tanzania Ministry of Natural Resources and Tourism (Wildlife Division, Tunduru District Council, Morogoro Region), Tanzania National Parks (NP) (Udzungwa Mountains NP, Ruaha NP, and Mikumi NP), Wildlife Management Areas (WMA), photographic safari operators, hunting safari operators, researchers, NGOs, foreign donors, the press, and other interested individuals (TEPS 2013a).

² Note: this estimate was suggested prior to receipt of new information resulting from the 2013 aerial surveys of the Selous-Mikumi and Ruaha-Rungwa ecosystems.

Tanzania due to poaching. MIKE collects data at representative sites throughout Asia and Africa in order to measure trends in the levels of illegal killing of elephants and identifies factors associated with those trends. MIKE evaluates relative poaching levels based on the Proportion of Illegally Killed Elephants (PIKE), which is calculated as the number of illegally killed elephants found divided by the total number of elephant carcasses encountered by patrols or through other means, aggregated by year for each site (CITES Secretariat *et al.* 2013). A PIKE level of 0.5 or higher translates to a level of illegal annual offtake that is likely to be higher than the annual natural birth rate and, therefore, indicates that the elephant population is very likely to be in net decline (CoP16 Doc. 53.1). Within Tanzania, PIKE values suggest widespread population declines due to poaching. At the Selous-Mikumi MIKE site, Tanzania's sole World Heritage site, the 2011 PIKE was 0.64 (based on 224 carcasses), a nearly 27% increase over the 2002-2010 average of 0.50. At the Ruaha- Rungwa MIKE site, the 2011 PIKE was 0.94 (based on 34 carcasses), the highest ever recorded for that site. The PIKE was 0.86 (based on 29 carcasses) at the Katavi-Rukwa MIKE site (CoP16 Doc. 53.1).

17. Aside from concerns about population numbers, we are also concerned about the mobility of the African elephant populations in Tanzania. The Panel of Experts noted, for example, that associated human settlements were increasing in size and number around protected areas and were accompanied by increasing human-elephant conflicts. These settlements and the associated conflicts were probably the most important factors limiting the elephants' mobility and range. It was the opinion of the Panel of Experts that -- at the rates of habitat change and land conversion at the time -- the corridors that still remained in Tanzania would be converted to unsuitable habitat in less than 5 years (CoP15 Doc. 68, Annex 6a).

18. According to Jones *et al.* (2009), Tanzania was working to minimize risks to African elephants, other wildlife, people, and property through improvements in spatial planning involving the identification, maintenance, and restoration of wildlife corridors. The Tanzania National Elephant Management Plan lays out a strategic objective to restore lost corridors and to increase protection for corridors that are still in use (TAWIRI 2010). We do not have updated information on the status of the implementation of this strategic objective, but based on the information available we are particularly concerned about the viability of the Selous (Tanzania)-Niassa (Mozambique) corridor. According to the 2013 survey of the Selous ecosystem only 32 elephants were counted within the Selous portion of the corridor, resulting in an estimate of $1,006 \pm 810$ (SE) elephants (TAWIRI 2013a). In addition, poaching in the Niassa Reserve has reached crisis levels, as evidenced by high carcass ratios (18%; population of 12,000 elephants) observed during October 2011 aerial surveys (WCS Mozambique *in litt.* 2014) (see paragraph 24 for an explanation of carcass ratios).

Sustainability of Offtake

19. In Tanzania, African elephant deaths occur as a result of several factors, including: 1) natural mortality; 2) trophy hunting; 3) problem animal control; and 4) poaching. In order to

evaluate whether offtake from trophy hunting is sustainable, all losses to the African elephant population must be considered.

Legal Offtake

20. Since 2007, the annual CITES export quota for Tanzania has been 400 tusks (sport-hunting quota of 200 elephants). During 2003-2006, the quota was 200 tusks from 100 individuals, while during 1997-2002 the quota was 100 tusks from 50 individuals. Tanzania, however, typically has not exported its full quota allotment in sport-hunted trophies or African elephant tusks. This may be an indication that the quota is set too high.

21. Although complete records on natural mortality for the entire country or on the killing of problem elephants were not available, the Panel of Experts were able to estimate the level of such offtake by analyzing the data from the ivory store databases of Tanzania. Based on 21 years of data for that country, an average of 231 elephants died annually from natural mortality, while another 287 individuals died annually from elephant control measures (CoP15 Doc. 68, Annex 6a). These annual mortality rates continue to be the best estimates available for Tanzania and are cited and used by the Government of Tanzania (TAWIRI 2010).

22. Based on a sport-hunting quota of 200 African elephants, as well as the estimates cited earlier for natural mortality and problem animal control in Tanzania, the overall legal offtake of African elephants in Tanzania is about 718 elephants annually. Considering the current population estimate to be 70,000 elephants, which we believe is a significant over-estimate because it did not consider the most recent survey figures, the legal annual offtake would be estimated at about 1% of the population. This figure is less than the annual population growth rate of 3-5% (CoP15 Doc. 68, Annex 6a) and in itself would be considered sustainable; however, sustainability is measured against total offtake, including illegal offtake, discussed below.

Illegal Offtake

23. Based on the MIKE report presented to CoP16 (Bangkok, Thailand, 2013), the levels of illegal killing across the African elephants' range are of serious and increasing concern. There has been an ongoing increase in the levels of illegal killing of elephants in Africa since 2006, with 2011 showing the highest levels of poaching since MIKE records began in 2002. The increase in poaching between 2010 and 2011 is statistically significant. As highlighted in paragraph 16, within Tanzania, PIKE values suggest widespread population declines due to illegal offtake. At the Selous-Mikumi MIKE site, Tanzania's sole World Heritage site, the 2011 PIKE was 0.64 (based on 224 carcasses), a nearly 27% increase over the 2002-2010 average of 0.50. At the Ruaha- Rungwa MIKE site, the 2011 PIKE was 0.94 (based on 34 carcasses), the highest ever recorded for that site. The PIKE was 0.86 (based on 29 carcasses) at the Katavi-Rukwa MIKE site (CoP16 Doc. 53.1). A PIKE level of 0.5 or higher translates to a level of illegal annual offtake that is likely to be higher than the annual natural birth rate, indicating that the elephant populations are very likely to be in net decline (CoP16 Doc. 53.1). In other words,

the illegal offtake is unsustainable at these sites. Recent information presented at the African Elephant Summit (Botswana, 2013) indicates that in 2012 and the first six months of 2013, the trend in PIKE levels for Eastern Africa stabilized at levels close to those of 2011 (CITES Secretariat *et al.* 2013), indicating that unsustainable illegal offtake levels are continuing.

24. Carcass analyses resulting from the 2013 Selous-Mikumi and Ruaha-Rungwa aerial surveys are consistent with MIKE data. Based on the surveys, there were an estimated 6,516 (\pm 534 SE) elephant carcasses in the Selous-Mikumi, spanning three years. Carcass analyses indicate that more than two thirds (67%) of these elephants were killed 18 to 30 months prior, with much fewer elephants being killed within the last 18 months (<5%). The carcass ratio for the Selous-Mikumi was calculated at 30%, which indicates unnaturally high mortality (TAWIRI 2013a). Natural mortality is represented by a ratio of about 7-8% (Douglas-Hamilton and Burrill 1991, *as cited in* TAWIRI 2013a). In the Ruaha-Rungwa ecosystem, there were an estimated 3,496 (\pm 342 SE) elephant carcasses, spanning over a ten-year period. Carcass analyses indicate that relatively fewer elephants were killed in the last 12 months (<13%). The carcass ratio for the Ruaha-Rungwa was calculated at 14.6%, which indicates unnaturally high mortality (TAWIRI 2013b).

25. It is expected that data showing high levels of poaching would be concurrent with data showing high levels of illegal trade, and this is the case with Tanzania. As noted in paragraph 16, a recent TRAFFIC news article reports that since 2009 Tanzania has made or been implicated in 18 large-scale ivory seizures (i.e., seizures that involved 500 kg or more in a single shipment). Of these seizures, Tanzania only made five of these seizures, while the other 13 seizures were made outside of the country. In total, these seizures represented nearly 43 tons of ivory, representing the death of about 4,000 elephants (<http://www.traffic.org/home/2014/1/27/tanzania-reshuffled-cabinet-should-address-poaching-urgently.html>). Although information on the origin of ivory from these seizures is not yet available, a significant proportion of the large seizures of ivory made in Asia in 2006 have been traced by forensic DNA work to elephants killed in the Selous-Niassa ecosystem (Wasser *et al.* 2009).

Sustainability of All Offtake

26. In its findings on Tanzania's CoP15 (2010) proposal to down-list its elephant population from CITES Appendix I to Appendix II (Note: the proposal was rejected), the Panel of Experts noted that illegal hunting can reduce the sustainability of legal offtakes, potentially negatively impacting the population as a whole. The Panel raised concerns that the poaching in the Selous-Mikumi ecosystem, which was happening at that time, could affect the long-term population sustainability. While the Panel concluded that the level of offtake in the Selous-Mikumi ecosystem was not sustainable at the time, the Panel asserted that legal and illegal offtake appeared to be sustainable for other elephant ecosystems where populations were stable or increasing, namely the Tarangire-Manyara, Ruaha-Rungwa, Katavi-Rukwa, Moyowosi-Kigosi and Serengeti (CoP15 Doc. 68, Annex 6a). In recent years our findings have been made under the supposition that the populations mentioned above were stable or increasing, rendering the

overall Tanzania elephant population to be sustainable. New information, however, indicates that the population decline is no longer restricted to the Selous-Mikumi ecosystem, but is occurring throughout Tanzania. Estimates are that Tanzania is losing about 30 elephants per day to poaching, a rate far greater than replacement through natural reproduction (TEPS 2013a and 2013b). This loss rate has recently been cited by TANAPA's Director General, Allan Kijazi (<http://allafrica.com/stories/201402041257.html>).

Conclusion

27. Although Tanzania has put into place legal instruments, wildlife management authorities, and a National Elephant Management Plan, the national elephant population has plummeted, primarily due to the ongoing illegal killing of elephants. Indications are that management resources have not been fully utilized and that governance in Tanzania is weak. In its findings on Tanzania's CoP15 (2010) proposal to down-list its elephant population from CITES Appendix I to Appendix II, the Panel of Experts raised concerns about the mechanism Tanzania used for funding the conservation, management, and protection of African elephants; however, after reviewing the actual allocations to the Wildlife Division between 2005 and 2009, the Panel concluded that sufficient funding was available for Tanzania to meet its enforcement obligations during that time period. The Panel of Experts also raised concern that the levels of offtake in the Selous-Mikumi ecosystem due to poaching was not sustainable at the time and could potentially affect long-term population sustainability. At the time, the Panel asserted that legal and illegal offtake appeared to be sustainable for other ecosystems where elephant populations were stable or increasing, namely the Tarangire-Manyara, Ruaha-Rungwa, Katavi-Rukwa, Moyowosi-Kigosi and Serengeti.

28. Our recent non-detriment findings followed the rationale laid out by the Panel of Experts and concluded that the import of sport-hunted trophies from Tanzania would be for purposes that are not detrimental to the survival of the species. However, now new information indicates that the elephant declines in Tanzania are no longer restricted to the Selous-Mikumi ecosystem, but are occurring throughout the country. MIKE analyses showing high levels of poaching at sites throughout Tanzania and ETIS data showing rampant, large-scale illegal ivory trade involving Tanzania, point to weak governance.

29. We recognize that sport-hunting, as part of a sound management program, can provide benefits to wildlife conservation and that sport-hunting of elephants is not the primary cause of the decline of elephant populations in Tanzania. However, given the significant decline in the elephant population due to uncontrolled poaching and questionable management and governance, we are concerned that additional killing of elephants, even if legal, is not sustainable and will not support effective elephant population recovery efforts in Tanzania.

30. Therefore, we are **unable** to find that the importation of sport-hunted trophies of African elephants taken in Tanzania during calendar year 2014 will be for purposes that are not detrimental to the survival of the species.

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