SRG 81/4/4

Joint Nature Conservation Committee

Non-detriment finding for one *Panthera leo* hunting trophy from Mozambique
Discussion document prepared by UK CITES Scientific Authority (fauna)

Background

The UK has received an application for one hunting trophy, equating to one wild-taken lion, hunted in the Chipanje Chetu community-based conservation area located in North Sanga in the northwest of Niassa Province in Sanga District (Figure 1). This area is 6,500 km^2 in size and is allocated a quota of two lions per year. The lion was hunted approximately 10 km outside the boundary of the Niassa National Reserve (NNR) (Figures 1 and 2). Accordingly, this application appears to fall under the SRGs negative opinion (last reviewed SRG76) even though the Chipanje Chetu community conservation area is contiguous with the NNR and the lion population is considered part of the wider Niassa reserve population.

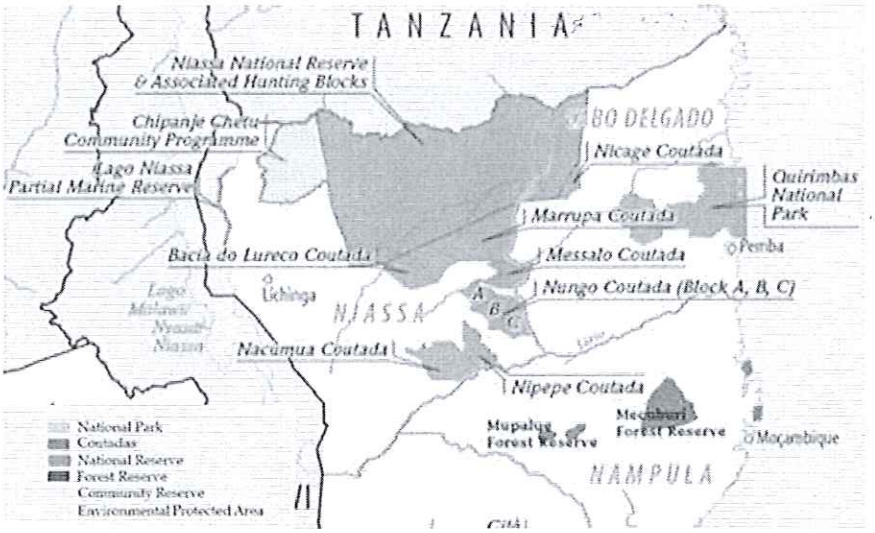

Figure 1 The conservation areas of northern Mozambique, including Chipanje Chetu Community Programme and NNR [Biofund, 2017]

Figure 2 The stated location of where the specimen was hunted (S 11 58' 26.03" E 035 43' 24.51)

Niassa National Reserve (NNR) is in northern Mozambican Provinces of Cabo Delgado and Niassa on the border with Tanzania, and is one of the largest protected areas (42,000 km^2) in Africa. It is managed through a co-management agreement between the Government of Mozambique (National Administration of Conservation Areas with Ministry of Land, Environment and Rural development (MITADER) and Wildlife Conservation Society (WCS). The NNR is mostly covered by miombo forest, open savannah and wetlands, with high wildlife diversity. The protected area supports the largest concentrations of wildlife remaining in Mozambique including an estimated 800 - 1000 lions, and a concentration of elephants, antelopes (impala, kudu, sable, waterbuck, hartebeest, nyala, wildebeest, duiker and eland among others), Cape buffalo, hippopotamus, zebra, wild suids, wild dogs and other felines (NCP, 2016; Rodrigues et al., 2017).

Quotas and reported trade

Annual Mozambican quotas of wild-taken *P. leo* trophies

	2012 & 2013	2014	2015	2016	2017
Quota MZ	50	53	60	54	49

Gross exports of hunting trophies from MZ, 2010-2015

App.	Taxon	Term	Country	2010	2011	2012	2013	2014	2015
II	*Panthera leo*	skin pieces	MZ	1			1		
II	*Panthera leo*	skins	MZ	4	55	33	26	2	
II	*Panthera leo*	skulls	MZ	5	58	35	29	1	8
II	*Panthera leo*	trophies	MZ	26	16	31	16	21	16

<u>The UK Scientific Authority has appraised this application and has concluded that the geographic area covered by the positive opinion formed at SRG76 should be extended to include the quota of two lions in the Chipanje Chetu community conservation area.</u>

Our rationale is presented below:

- At SRG 76 (27/06/2017) the EU formed two decisions for lions originating from Mozambique;
  - a positive opinion for the wild population from the Niassa reserve and,
  - a negative opinion for all populations except from the Niassa reserve.

  Previously, at SRG 74 (15/12/2015), a country-wide negative opinion was formed, replacing no opinion iii) (refer to the SRG) in place since SRG 60 (07/06/2012).

It seems perverse to form a positive opinion for the Niassa Reserve without taking into consideration the surrounding hunting blocks and managed areas that form a buffer zone around the park, although they do not appear to be explicitly mentioned in the discussions surrounding the formation of the positive opinion. From the information provided we consider that the Chipanje Chetu community conservation area is well managed and a quota of two lions per annum is sustainable. We note the management here may in fact be superior to that in the Niassa Nature Reserve.

Additional information / considerations:

Criteria have been recommended to achieve sustainable offtake, while retaining conservation incentives from trophy hunting, including area- and age-based approaches for male lions. For most lion populations, the offtake has been recommended as no more than 0.5 lions per 1,000 km^2 (Packer et al., 2011). High-density or well-managed and increasing populations might sustain an offtake of 1 per 1,000 km^2, whilst low-density populations might be adjusted downwards (MacDonald, 2016), for example in the NNR, where the mean home ranges of lions are four times larger than those recorded in Selous Game Reserve. The density in the NNR increased from 1.7 per 1,000 km^2 in 2005 to 2.1 per 1,000 km^2 in 2008 (Berg and Beck, 2012). As a comparison, in the Matambwe phototourism sector of Selous 27.9 adult males were recorded per 1,000 km^2 (Packer et al., 2011).

If hunting is restricted to a minimum age, populations can be sustained (Whitman et al., 2004). This has been set at 6 years and older, although recent modelling suggests 7 years might be more prudent (MacDonald, 2016). As a safeguard, Creel et al. (2016) suggest combining the area- and age-based approaches with a maximum offtake of 0.5 lions per 1,000 km^2 *and* a minimum age of 7 years. The Niassa National Reserve began implementing age-based lion trophy hunting in 2007 and have reported successes in the management of lion hunting that include increasing lion trophy age, hunt success, and population size. Age restrictions are paired with annually-revised quotas based on compliance - operators that harvest males equal or older than 5–6 years are 'rewarded' the following year with an equal or higher quota, and operators harvesting males 4– 5 years are 'punished' with reduced quotas (Miller et al., 2016). Sport hunting is considered sustainable in NNR and potential negative impacts on lion population structure due to sport hunting alone have been minimized (Berg and Beck, 2012).

However, trophy hunting is usually only one of several threats facing lions, and it should be noted that even well-managed hunting areas can still suffer population declines if threats such as bushmeat poaching are present (MacDonald, 2016). Data indicate that 40-70 lions (4% to 8.75% of the estimated population) may be killed by bushmeat snares in NNR each year (Berg and Beck, 2012). The Niassa Carnivore Project reports that across Niassa Reserve the lion population appears to be stable between 800-1,000 lions but may be starting to decline with some areas of concern in which there are no carnivores (lion, leopard, hyaena, wild dog). In NNR 23 lions were illegally killed between 2013 and 2016, although the true total is likely more (NCP, 2016).

We have been informed that lion trophies taken in the Chipanje Chetu area comply with the recommended area- and age-based criteria; all lion hunted were males over 6 years old, with a quota density 1 lion per 3,250km^2.

A summary of the information provided by the hunting concession, Lipilichi Wilderness, indicates:

- Programa Chipanje Chetu is allocated a quota of two lions per year.
- The area is 6,500 square kilometres in size and we have a fully equipped anti-poaching unit of 60 rangers operating 365 days per year.

- The hunted lion was a male and aged at 9 years old.
- The lion population falls under the same population of the Niassa reserve, it is a contiguous conservation area without barriers under the same professional wildlife census conducted by the Niassa reserve, following the same criteria.
- They have managed and operated the area for 10 years and in that period hunted 7 lions (i.e. 0.7 lion p.a.).
- They employ 105 employees from the local communities and are recognised by the Mozambican government as the flagship safari operation of Niassa province.
- The community sees direct benefits from the hunting operation.
- Wildlife numbers have doubled in 10 years

- The population of lions in the Chipanje Chetu community conservation area is considered part of the Niassa reserve population. The area is a contiguous conservation area with no barriers.

- Bauer et al. (2016) write in their Red List assessment: "The unfenced Niassa subpopulation is estimated to have increased by over 250% since 1993; despite severe bushmeat poaching the Lions are still recovering from excessive prey depletion during civil war. In addition, on a shorter time scale, Lions have benefited from extensive ivory poaching, which has provided them with sizeable quantities of elephant meat ([redacted] pers. comm. 2014). Human population density in Mozambique is 74/km^2 with sizeable numbers of people living inside Niassa Reserve, so unless management is further strengthened, this unfenced Lion subpopulation may soon experience declining food supplies and increased human-lion conflicts. These arguments strongly suggest that the 'boom' in the Niassa Lion subpopulation has stopped and is unlikely to be repeated in the future. We therefore consider Niassa to be a special case and treat it as an outlier in our analyses." [redacted] (pers. comm., 2017), in clarifying scope of the *unfenced Niassa reserve population* referred to in the Red List assessment (Bauer et al., 2016), states "we only had access to data from the Reserve, and that was depicted in the supplement. However, the Reserve is unfenced and indeed extends beyond the Reserve boundaries. While our data reflect only the Reserve, it makes sense to consider the ecosystem level in management decisions."

- "The Niassa Carnivore Project (NCP) has been working in NNR since 2003 in close collaboration with the Mozambican NNR management authority, Niassa communities and tourism operators. Fifteen years of experience in NNR has shown us that conservation of large carnivores is impossible without partnering with local communities, NNR management authority, district, provincial and national government, and tourism operators. We feel that supporting conservation friendly development and alternative livelihoods to alleviate poverty and meet basic health needs and thereby improving human well-being is essential. For this reason, our conservation programs focus not only on directly reducing threats like poaching, snaring and retaliatory killing in response to attacks on people and livestock, but also on developing alternative livelihoods, testing ways to partner with communities, revenue flow and education." (NCP, 2015).

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